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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment, Administration and Maintenance of Hospitals and Sanatoriums.

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What University Contacts Mean to the Teaching Hospital

By R. C. BUERKI, M.D.

Superintendent, State of Wisconsin General Hospital, Madison

THE most evident value of the medical school to the hospital is the direct contact it makes possible between the teacher and the patient. It is true of teachers in a medical school, as of teachers in other university schools, that a considerable portion of their time is devoted to study, reading and research, which results in benefit to the patient through the intelligent application of the newer methods that have been developed in treatment and diagnosis.

The very nature of the work of the busy general practitioner of medicine makes impossible, except to a limited extent, the original trial of newer methods and he is therefore forced to await the trial of these newer methods by men who are on the staffs of hospitals connected with teaching institutions. In recent years, the two outstanding examples of this have been the trial in teaching hospitals of both insulin and liver extract.

The Value of Detailed Examinations

It is evident that the examination of a patient by student, intern, resident, attending man and chief will in the main result in a more thorough study of the case and a more definite summary of the points that determine diagnosis than will result from an examination made by the average busy practitioner. I have heard this multiple type of examination criticized as needless, and as exhausting to the patient. Yet after prolonged observation of patients in teaching hospitals I have never seen any harm to the patient result from this type of thorough examination, although

at times the condition of the patient is such that much of this routine must be dispensed with. The detailed history taken and the minute observations recorded on the chart of a patient in a teaching hospital are of value both to science and to the patient, even though much of the detail may be of little or no value at the time.

How Departments May Cooperate

The teaching hospital should expect help from the medical school in other than direct patient contacts. The dietary department should have as a member of its advisory staff, a member of the department of biochemistry who is interested in and is studying clinical problems as they are affected by biochemistry, or it should have a clinician primarily interested in biochemistry. This member of the medical school faculty should not be expected to pass on routine dietary matters, but certainly to him should be left the preparation of standard routine diet lists that may be used as a guide by the dietitian in the preparation of standard diets. To this man the staff members should bring their complaints and he in turn should iron out the differences with the dietary department. Such a contact man will do much to make the work of the department more valuable and will also eliminate interdepartmental friction.

The pharmacy should have attached to it a member of the department of pharmacology interested in clinical medicine, or a clinician interested in the scientific application of drugs. This individual should prepare a detailed list of drugs

and preparations that should be carried in stock. Additional preparations should not be added to the list until they have been approved by a pharmacy staff committee of which the individual attached to the pharmacy staff is chairman. A marked financial saving will result from this type of organization and the cooperation of the staff with the pharmacy will be definitely improved.

Connected with the medical school of the University of Wisconsin, we have a state laboratory of hygiene, which examines upward of 70,000 specimens sent to it from all over the state each year. The director of the state laboratory of hygiene is also the director of the hospital laboratories. While the laboratories of the hospital are equipped to do all types of laboratory work, yet the interlocking of personnel and the close physical connection of the hospital laboratory with the state laboratory of hygiene are of material advantage to the hospital.

Wisconsin also maintains at the state university in conjunction with the medical school, a psychiatric institute that does blood and spinal Wassermanns and blood chemistry for any physician of the state, at the cost of a few cents an examination. The close relationship of the teaching hospital to this laboratory makes it possible for the hospital to avail itself of this high type service at no appreciable cost.

In connection with the medical school there is also a state toxicologist who does toxicologic examinations for courts throughout the state. This service is available to the teaching hospital in arriving at a diagnosis in cases of questionable drug poisoning. Within a three months' period this service has confirmed the diagnosis of three drug poison cases and has assisted in their treatment.

University Contacts Help Nurses

I have made specific mention of three services at the University of Wisconsin realizing that the same type of departments are not available to the average teaching hospital, but I am sure that any teaching hospital connected with a university, even if it is not connected with a medical school, can apply to the university departments of chemistry, biology and bacteriology for aid in solving many of its problems.

Schools of nursing education in connection with teaching hospitals that are in turn connected with universities, even though there is no medical school, can benefit and are benefiting greatly by their many university contacts.

It is exceptional when a busy practitioner not primarily interested in teaching becomes a good lecturer, particularly in the preclinical subjects,

such as chemistry and biology. A university instructor on the other hand can with ease meet the requirements for teaching such courses to the advantage of the student nurses. The teaching of clinical subjects by clinical teachers can only improve nursing education.

There is, in addition, an extra-curricular advantage to be derived from the contact of a school of nursing in connection with a university. Little as we like to admit the fact, the average girl going to college looks down upon her classmate who upon finishing high school goes into nurses' training in some hospital. When the course in nursing is simply one of the many university courses offered, this is no longer true. The nurses should not have their own gymnasium, swimming pool, bowling alley and tennis courts, but should use the university facilities. This results not only in a material saving to the hospital, it also increases the contacts of the nurse, which will be of benefit when she begins the practice of her profession.

Of course, the five-year combined college and nursing course can be offered only in conjunction with some college or university. In these days of increasing hospital costs, the hospital school of nursing about to enter into contact with a university can be assured that the result will lower rather than increase hospital costs.

Do Hospitals Miss Their Opportunities?

Few hospitals connected with universities make use of more than a fraction of the possible university contacts. Practically all universities have departments of applied arts. It may be suggested to the head of that department that some of the better students be assigned the problem of painting fairy tale murals for the orthopedic and pediatric wards and for the nursery. The result of this work will give endless delight to the patients.

The school of agriculture has on its staff men interested in statistics relative to supply and demand and in the problems involved in marketing. Their suggestions as to the proper methods of buying and the proper time to buy, and their estimate of future prices, will prove invaluable. As the result of a fifteen-minute conference with a member of the department of agriculture, one hospital has saved, on an average, six cents a pound on butter during an entire year. It is also possible to secure at a saving products from a farm run by the college of agriculture.

Certainly the department of home economics can offer invaluable suggestions as to kinds of food that should be purchased. Some member of the home economics department is probably inter-

ested in textiles. This person can aid in the purchase of blankets and linens.

The school of engineering in the university should be constantly used in solving the many mechanical problems that arise. It is true that the average electrician can answer most questions pertaining to wiring and currents, but it is far more satisfactory to have the head of the department of electrical engineering solve any problem regarding the installation of new equipment. The manufacturers of electrical equipment have their own engineers, but to have their figures checked by some member of the faculty who is interested in the hospital's problems is comforting. What is true of electrical equipment and installation is equally true of heating, ventilation, plumbing and all types of mechanical installation in the modern hospital. A few years ago when the plans were drawn for the State of Wisconsin General Hospital, Prof. G. L. Larson, who was checking the necessary supply of both hot and cold water, could find no figures showing the maximum consumption per patient at any given period of the day. This resulted in an elaborate study over a period of five years, the findings of which were recently published in the *Journal of the American Society of Heating and Ventilating Engineers*.

The department of psychology is always anxious to observe any case of abnormality that comes within its field. This careful study will result in benefit to both the patient and to the department.

Students in the department of physical education should be encouraged to work in the department of physical therapy in the hospital, where they can intelligently observe the results of this therapy on the patients they will later be called upon to refer to physicians for care. Only by example can the dangers of their attempts at treatment of patients be adequately stressed.

Extending the Hospital's Sphere

Every hospital is constantly confronted by legal problems. Members of the law school faculty are the logical persons with whom these troubles may be discussed.

No hospital is entirely fulfilling its obligations to a community unless it participates in general postgraduate education. Through cooperation with a university extension division, a hospital may extend its sphere of education to the physicians of its community.

Cooperation is always the key to success, and when a teaching hospital affiliates with a university or college the benefits that accrue to the hospital are great and varied.

Is the American Press Friendly or Unfriendly to the Hospitals?

Are the newspapers in the United States friendly or unfriendly to the hospitals?

That the opinion abroad is that they are not is apparent in the following editorial note in *The Hospital*: "The hospitals in England, unlike those of some other countries, notably the United States, are always sure of the sympathetic interest of the press. Criticisms are rare. General appreciation and even active support are common. Hospitals can reciprocate these good feelings, especially when there is any important event of which the press will be expected by readers to present a good report.

"A well arranged press view a day or two before the event provides a useful opportunity for the reporters to obtain adequate particulars of a new building or any development that may be the occasion of a royal visit or other ceremony. A carefully written memorandum giving the salient facts is worth the time and money spent on it. A guide to direct attention to the most important points can be useful although press representatives require this information in a form somewhat different from that suitable for ordinary visitors to a hospital. The hospitality of a cup of tea will be appreciated especially if it is provided in restful surroundings. Committees who hesitate to incur expenditures in these directions can be assured that the publicity encouraged in this way will be really beneficial to the hospital and to its work."

Detention Hospitals at Airports Suggested

Detention hospitals should be placed at airports and adequate medical services should be provided as a safeguard against the introduction of infectious diseases by persons who in the future may be expected to arrive in this country from distant points by airplane, according to a statement issued by the department of public health for California.

Possibility of persons reaching this country by air before the termination of incubation periods of infectious diseases will make it necessary to hold such persons temporarily in restraint at airport medical quarters, according to the statement. Unless provision is made for such service at an early date, it appears that serious problems in communicable disease control will be thrust upon the country without any forewarning, and that health officers throughout the United States may be called upon suddenly to meet situations that are likely to be trying and that may be destructive to the health, safety and prosperity of the people.

Philadelphia Closes Its Diphtheria Hospital

The special diphtheria hospital in Philadelphia has been found to be no longer necessary, due to the effectiveness of the campaign that has been waged against diphtheria in that city, the *Journal of the American Medical Association* reports.

The Hospital— **An Industry Everybody Owns**

By JOHN A. McNAMARA

Executive Editor, THE MODERN HOSPITAL

THE ambulance comes clanging up the street and suddenly stops before a house. After a brief interval the inert form of the "victim" is borne out on the stretcher. As noisily and swiftly as it comes, the ambulance departs. The neighbors leave their windows with a sigh, routine work is resumed and only occasionally do those who knew her wonder how poor Mrs. Brown is getting along "at that hospital."

Will she return?

Probably not.

Will she get good treatment there?

Probably not.

It can't be very cheerful over there—nothing but sick people and doctors and smells. Why didn't they leave her home where her neighbors could tend to her? What good is the hospital anyway, they argue.

Let us see what the hospital offers to justify its existence.

When we think of hospitals we usually associate them with medicine, illness and accidents. Seldom do we consider the relation of the hospital to other industries, nor do we feel that the hospital is an industry in exactly the same sense as is the shoe factory, the steel plant or the clothing trade. But it is, with the possible exception that the commodity the hospital deals in is not sold for profit. As a matter of fact, this commodity—health—is usually sold at a loss.

It takes money and plenty of it to keep the hospitals of the United States open, and even in these days when the disbursement of huge sums is considered commonplace and we speak in terms of millions and billions, it is interesting to note that over four and a half billion dollars are tied

up in hospital property and equipment. The conservative estimate is \$4,575,550,000, and this does not include the \$134,000,000 that are spent every year for clinics and out-patient departments where the poor and the near-poor are treated for little or nothing.

To equip the modern hospital is no easy task. The problem is probably more complicated than the furnishing of any other type of building that houses a business, for the hospital combines all that is used in hotels, and much that is used in laundries, power plants, scientific laboratories, modern homes, business offices and college dormitories. Such varied equipment as potato peelers, x-ray equipment, bed linen, bookkeeping machines, flat work ironers, wall pictures and

draperies, laboratory apparatus, carpets and rugs, mechanical stokers, bedside tables, ice making machinery, vacuum bottles, signal systems, china and glassware, surgical instruments, overstuffed furniture, mechanical horses, cafeteria equipment, pharmaceutical supplies, uniforms, ambulances and some five thousand other related and unrelated items are to be found in every hospital of more than twenty-five beds.

For instance, the laundry of the hospital must be as complete as that of the average commercial laundry; the cafeteria service must be as complete as that found in any

of the business cafeterias and often it is much better equipped; the facilities for cooking must not only be as elaborate as those in hotels of comparable size, but must have in addition provision for the preparation of special diets and the quick serving of foods to bedridden patients; no photog-





The hospital is an industry just as the steel mill is, with the exception that the commodity the hospital deals in is not sold for profit.

rapher's developing room is as costly as the hospital's x-ray department; lobby and waiting rooms must be tastefully furnished; telephone service must be unexcelled and the business office must be a model of its kind.

Then, there is a long list of things that are to be found only in hospitals, such as operating tables, sterilizers for instruments and even for mattresses, nurse signal systems, laboratory equipment with special kinds of acidproof tables and floors, the mortuary, especially designed beds, unusual types of bathtubs, bassinets for newborn babies, baby incubators, besides some thousand special items that are sold almost exclusively to hospitals.

It should be borne in mind that ten million persons enter hospitals as patients every year and if each of them had only two visitors—most of them have four and five—it would mean that annually the hospitals of this country are visited by thirty million persons, a fourth of our estimated population. All of them, of course, cannot be pleased but the progressive superintendent sees to it that the best types of furnishings are installed and the best foods are served to both patients and visitors. Nearly every hospital has a special dining room for visitors where laboratory

tested foods and beverages are served, and where one may be assured of healthful diets.

For foods alone the hospital spends \$184,976,403.80. Of this amount nearly twenty-five millions are spent for eggs and someone has figured out that it takes the full time of 3,259,583 hens each year to supply hospitals with these eggs. No cold storage eggs, no "state eggs," but only the strictly fresh are even considered, and this is but a sample of the care that is used in the purchasing of foods. Nearly eighty-two millions are spent for meat, sixty-seven millions for milk and cream.

Let us take so unimportant and lowly a product as mops—last year the hospitals of the country spent a total of close to six hundred thousand dollars for mops. Ordinary bed sheets of a better quality than ordinarily is used cost the hospitals nearly nineteen million dollars, and toilet soaps (which do not include special soaps or scouring powders) cost seven million dollars.

Perhaps it should here be emphasized that rain or shine, good weather or bad, prosperous or hard times the hospitals must continue to exist, they must buy every year at least a billion dollars worth of supplies. Each succeeding year the amount increases with the ever growing popula-

tion and the ever broadening demands for better sanitation and less sickness. Sickness cannot be ruled by the stock market, and even when Wall Street bears raid, stocks sell low, customers are sold out and other individual catastrophes happen, these events, so momentous in the lives of stock traders, have no effect whatever on those who are sick or on the facilities for returning them to health.

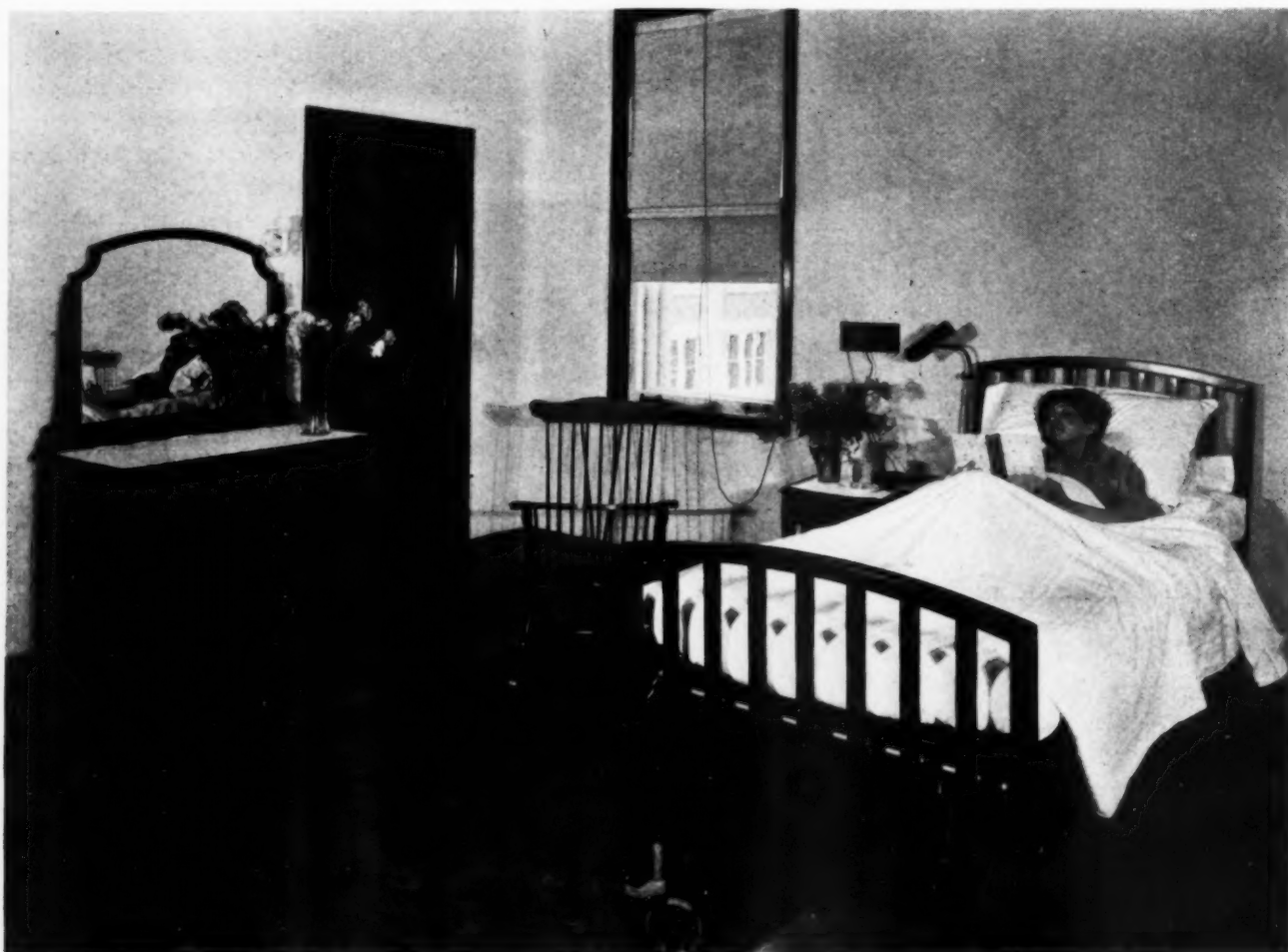
The enormous expenditures outlined above are spent not for the sole purpose of getting the sick well as is generally supposed. It is of course important (particularly does the patient think so) that the sick be cured, but to cure them is only part of the hospital's work. There are three or four other excellent reasons for the institution's existence and the spending of these billions of dollars. Chief among them is keeping the well in health and keeping the wheels of industry going.

The average number of days that each patient spends in the hospital has been reduced from fifteen to twelve during the past fifteen years. For example, if the approximate number of patients in

general hospitals last year was eight million—this does not include those in mental, tuberculosis, chronic or convalescent hospitals—and if each one of these patients is worth five dollars a day from a productivity standpoint, then the hospitals returned to industry a total of \$120,000,000 as a result of the efficient management that made possible an earlier recovery of health.

Hospital Death Rate Has Decreased

Of importance to society itself, and wholly apart from this benefit to industry, is the reduction of the death rate in institutions. The death rate in hospitals at the present time is well below 5 per cent, or, in other words, of the more than eight million persons who were patients in general hospitals last year 7,600,000 came out alive. This condition, however, is due to several factors. For instance, the popularity of small apartments has increased the use of hospitals, the "terror" of going to the hospital has been removed, doctors are more prone to send patients to hospitals because they know they will have a better chance of recovery and, lastly, the improved highways make



The modern private room combines all the conveniences of a hotel with accessibility to the newest scientific hospital equipment.



This picture shows service to the patient as interpreted by St. Luke's Hospital, Chicago.

it an easier matter for farmers to come to city hospitals for treatment and care than was the case ten years ago.

The latest movement in hospitals is to keep people well. Periodic health examinations, preventoriums in place of sanatoriums, health instruction in schools and colleges, properly balanced diets and careful instructions to departing patients are all factors in making the citizens realize the greater importance of remaining in health rather than of being cured when they are sick.

The checking of epidemics has greatly increased factory and office efficiency, the training of interns has made better medical practice possible, the improved health of school children has aided greatly in increasing the productivity of our people and the many therapeutic aids that have been developed primarily for hospitals have added to the country's better health and better industrial habits.

It has often been said that all hospitalization should be free and that all hospitals should be tax supported and under municipal supervision. This is a tremendous mistake and a mistake that would prove very costly in the long run. When we say that health should be the responsibility of the state, we are theorizing, which is always pleasant but seldom profitable. It is almost axiomatic to say that when politics enters the hospital's front door efficiency and the welfare of the patient go out the back. Two things that cannot and never should be mixed are politics and health, and when this is attempted the community suffers. One of our large Eastern cities is now suffering

from "acute politicitis" and as a result the death rate of that city is considerably higher than in another Eastern city of about the same size and importance where political interference is not tolerated. Efficiency, cost and patient welfare—three important factors in hospitalization—are usually out of line when the superintendent is appointed by "the party in power."

Exceptionally efficient management will be found in every hospital that has an administrator who must report to a responsible body. Most hospitals have a policy making organization known as the board of trustees and this assemblage is made up of business men of the community. It is the duty of its members to see that the hospital is conducted as efficiently as are their own offices.

Few realize that there are different types of general hospitals. The term in all but three or four instances is a misnomer because the so-called general hospital does not accept all types of cases as might be supposed. For instance, few general hospitals accept mental cases, tuberculous cases, contagious or chronic cases. The general hospital usually takes only those people who are suffering from acute illness or who are in need of surgical attention. Set aside and under different management will be found mental hospitals, usually under control of the state; tuberculosis hospitals, under the control of some governmental agency; chronic hospitals which are either a separate charity or the successor to the poorhouse, and the contagious hospital, usually a municipal affair.

The general hospitals are again divided ac-

cording to their management, hence we have Catholic hospitals conducted by Sisters of charity and under the auspices of the Catholic church; Protestant hospitals of all denominations with the Methodist church in the lead; county and city hospitals under the control of the county or city; memorial hospitals erected by charitably inclined citizens and often named after the largest or first donor; private hospitals owned by a physician or a group of physicians, and lastly, "foundation" hospitals such as those that have been established by the Commonwealth Fund and the Duke Foundation.

To say that any one group is managed more efficiently than another would be contrary to fact. Catholic hospitals pay no salaries to their executives and hence need less money for the same service rendered. Protestant hospitals receive liberal support from their churches and in the main keep their expenses well in hand. Memorial hospitals often are well guarded by the trustee of the endowment and hence inefficiencies do not creep in. Privately owned hospitals are conducted solely according to the ability of the owners as business men. The foundation hospitals are partially supported by the various foundations and are too new in the scheme of hospitalization for a report to be made regarding them.

There is such a close interrelationship between hospitals and other industries that there should be a thorough understanding of what the hospitals are doing and what their future will be.

Community Support Is Necessary

Every hospital in every community has an important bearing upon that community's prosperity. It is an industry deserving of every consideration, in fact it is a part of every other industry and upon its success will rest the success of the entire social structure of the town. To ignore its existence by assuming an indifferent attitude; to embarrass its progress by unjust and unfounded criticism; to refuse it support and to do it an injustice as some compensation insurance companies are doing, bespeak a lack of intelligence that does not do credit to business methods.

Every hospital, private or public, belongs to the citizens of the community, it is as important to them as are the schools or the city hall. It should be the center of all health activity and the guardian of public well-being. It is at once our friend and protector and its success is our success.

We do not abuse our other institutions and industries and we must not unjustly criticize the hospitals.

What Do Administrators Think of Their Record Departments?

What do hospital superintendents think of their record departments and of those in charge of them?

Answers to a questionnaire that was sent to a large number of hospital administrators throughout the country, according to the *Trained Nurse and Hospital Review*, have made possible the following conclusions: "That in at least 50 per cent of hospitals of the country the executive officers are fully awake to the importance of maintaining an efficient record system and wish to make their own record departments of the greatest possible service; that the higher type of record librarian who can offer both the qualities of a gentlewoman and the qualifications of the well trained worker is the type desired in the up-to-date hospital; that those engaged in training record clerks are on the right track in focusing their attention on the teaching of medical terminology, methods of indexing and filing and the make-up and uses of case records; that as the importance of the record department becomes more fully recognized, the funds for its maintenance and equipment will be more readily forthcoming, and more adequate remuneration and more satisfactory tools for working will be the lot of the record librarian."

Presenting the Patients' Viewpoint

Perhaps no more enjoyable book relative to hospital work has been published than that entitled "Merely the Patient" which has been written by a former patient at the Mayo Clinic, Henry Howard Harper, Boston, with a prefatory note by Samuel W. Lambert, M.D.

The book is extremely humorous, every page will be read with keen enjoyment and the little volume will encourage a more thoughtful attitude toward the patient.

Mr. Harper has brought out many excellent points in his discourse and he has done it well. He criticizes the multitude of examinations that were apparently unrelated to his left kidney, and while very justly praising the fine surgery and treatment at the Mayo Clinic, he wonders whether it is not bound up with too much red tape.

It is difficult to imagine any hospital superintendent struggling along without reading Mr. Harper's happy book.

Rosenwald Fund Benefactions During 1929

Of the \$4,000,000 of the capital assets of the Julius Rosenwald Fund that were appropriated for philanthropic purposes during 1929, \$250,000 went to the University of Chicago Clinics for the medical services; \$150,000 to the Massachusetts General Hospital, Boston, toward a pavilion for patients of moderate means; \$40,000 to the Committee on the Cost of Medical Care; \$250,000 to Howard University, Washington, D. C., for biologic research and additions to the plant; \$50,000 for fellowships for advanced study by Negroes, chiefly to train, physicians, nurses and teachers; \$62,500 to the Canadian Mental Hygiene Committee for studies of child growth in Toronto; appropriations for Negro hospitals and colored public health nurses in sixteen counties of five of the Southern states.

Should the Hospital Tell?

By S. S. GOLDWATER, M.D.

Hospital Consultant, New York City

IT IS the business of the hospital to know the truth about itself, its staff and its patients. The duty of ascertaining these facts rests in part on the administration of the hospital and in part on the staff. From time immemorial physicians have been concerned with the question of medical confidences, but the personal histories and bedside notes of patients constitute only a small part of the confidential information that hospitals are called upon to handle with discretion.

When the hospital throws the mantle of its protection about a trusting patient, is it absolved from all obligations except its obligation to the patient or are there duties that remain—duties to other individuals, to the state, to society—which outweigh its tacit pledge of secrecy? When friends inquire and newsmen cajole, when lawyers threaten and the courts command, when husbands demand and wives implore, should the hospital tell? Silent partner of saints and chosen confidant of sinners, the hospital is a great storehouse of secrets sacred and profane, which it is free to use for good or for ill. Yet it is not altogether free, for in some countries strict statutes must be observed while in others powerful sentiments traditionally associated with clinical work favor the hospital's voluntary allegiance to the Hippocratic oath, which declares that "whatever, in connection with my professional practice, I may see or hear, I will not divulge, holding that all such things shall be kept secret."

When Medical Secrets Can Be Told

The legal and ethical aspects of medical confidences have been discussed by many able writers. The position that hospitals take with respect to such confidences is usually and properly the same as the position of the medical profession itself. In France and Germany hospitals have the clear guidance of laws that make the disclosure of medical secrets a criminal offense. The legal position of medical confidences in England, which bears a strong resemblance to approved American practice, has been succinctly summed up by Lord Riddell as follows: (1) A doctor, being in a fiduciary capacity, must preserve his patients' confidences unless relieved from the obligation by some lawful excuse; (2) legal com-

pulsion or the patient's consent is a lawful excuse, and the performance of a moral or social duty may also be a justification; protection of the doctor's interests may also justify disclosure; (3) if called as a witness, a doctor must answer such questions as may be put to him by the court; (4) a doctor shares with other citizens the duty to assist in the detection and arrest of a person who has committed a serious crime.

How to Meet Inquiries

These basic principles must be kept in mind by the hospital in the face of inquiries, usually well intentioned and often irritatingly persistent, that arise in many quarters and from a wide variety of interests. Among those seeking confidential information are anxious relatives and friends whose motives are usually above criticism, employers to whom the desired knowledge may be of practical value, social agencies offering cooperation in personal and community service, physicians at work upon clinical histories, insurance companies in search of vital statistics or of evidence with which to dispute the claims of policyholders, benefit societies seeking to verify the statements of members, health officers aiming at measures of prophylaxis, police officers bent upon the detection and punishment of crime and reporters looking for sensational news. To any of these the hospital may be a help or a hindrance, and the hospital administration that is ill-informed concerning its duties and its prerogatives or that neglects to instruct or to control its officers and agents sooner or later will find itself in a position that is either legally or morally indefensible.

It is through the clinical investigations of its staff that the hospital comes into possession of the confidential histories of its patients, but many other facts in which the public is interested are or should be known to the hospital. In the use of these facts the hospital has no such body of law or tradition to guide it as in the case of "medical confidences." One order of facts, and a most important one, has to do with the qualifications and methods of the staff.

It is charitable to assume that appointing boards fully investigate the qualifications of their medical appointees, but it would be almost fan-

tastic to assert that hospital boards, at any rate before the advent of what is commonly known as hospital standardization, systematically studied the actual performance of their appointees and acted upon their findings when the record was more or less incriminating. Latterly, through the partial standardization of methods of clinical recording and the examination in conference of the clinical course of fatal cases, hospitals have been supplied with clues to many weaknesses in the work of their individual clinicians or clinical teams.

When clinical results are less favorable than might reasonably have been expected from the exercise of average care and skill (or from skill somewhat above the average, for the degree of skill that passes legally as just sufficient to avoid the charge of malpractice is hardly good enough to satisfy the demands of a conscientious hospital administration), the hospital is under moral obligation to look closely into the situation and eventually to take such steps as may be necessary to ensure the safety and welfare of its future patients. The task is far from simple, for there is no fixed standard for the appraisal of clinical skill from the hospital's standpoint. Latent or potential ability is not in itself enough. An attending physician may be a man of outstanding ability and may nevertheless conduct his service so poorly that patients do not get the full benefit of his knowledge and skill.

When Staff Men Fall Short

Some errors in diagnosis or treatment or in the ethical conduct of a hospital service are easily detected, others are not. But whether as the result of statistical analysis or clinical conferences or from less formal gossip or report, a hospital in which a large staff is employed sooner or later finds itself in possession of knowledge of a delicate, not to say critical, character concerning the members of its staff. An overwhelming majority of hospital staff men are beyond question competent and reliable, but few large hospital organizations are without their weak spots. For example, a surgeon is known to be hasty in diagnosis, is given to exploratory operations on the flimsiest grounds, is careless of aseptic technique, lacks dexterity, is so slow as to prolong difficult operations beyond the danger line and is disposed to shift to juniors or even to nurses the postoperative care of complicated surgical cases. Not all of these faults, of course, are likely to be chargeable against any one man. Or perhaps an internist becomes addicted to fads, has little or no interest in certain common but clinically important varieties of disease, is careful in diagnosis

but painfully weak in therapy, is alarmingly prompt in discovering surgical indications in cases of vague abdominal complaint and has the suspicious habit of referring all such cases for exploratory operation to a surgeon with whom he is on particularly intimate terms. Or a laryngologist, to cite a familiar example, finds diseased tonsils in almost every patient he examines, regards the tonsils as the source of every known human ailment, counts his tonsillectomies by the thousand, regards every tonsillectomy as an infallible cure and insists that any patient who continues to complain after treatment is inexcusably stupid and obstinate.

Weeding Out the Undesirables

If a hospital is practically certain that a member of its staff is the victim of a dangerous fallacy or is habitually in error, what is to be done? Shall the offender be permitted to parade before his colleagues and the public as a skillful and reliable practitioner who is apparently endorsed by the reputable hospital with which he is connected? Shall he be quietly invited to resign and when he does so, publicly thanked for his "valuable services" and thus aided to continue his objectionable practice in some other institution? Or shall he be dismissed in such a manner as to make it clear to the community that something is wrong with him and that his patients had better beware? If the choice lies between damaging the professional reputation of one man and endangering the lives or health of many, where does the duty of the hospital lie? In the face of a problem of such moment, which no hospital can escape, is it not evident that the hospital board that measures the success of its administration solely by the treasurer's balance sheet and pays no heed to the often glorious but sometimes tragic actualities of its clinical service is morally guilty of malfeasance or at least of nonfeasance?

The necessity of balancing hospital or private interests against the public welfare does not end with the disposal of matters affecting the medical staff, for hospitals are often obliged to mediate between nurses of questionable ability or repute and their prospective employers. Many a nurse now engaged in successful practice owes the freedom to continue her professional career following a serious error in professional or private conduct to the sympathy and discretion of hospital or training school officials.

The army of American nurses is a multitudinous one, recruited by more than two thousand hospitals or by the nursing schools affiliated with them. The educational opportunities offered to nurses range from very good to extremely bad,

and while the most popular schools of nursing have applicants to spare and are therefore in a position to make a discriminating selection of students and to insist that approved applicants shall present convincing evidence of suitable educational and moral qualifications, other schools are compelled to enroll almost any applicant who appears to be physically fit, without examining too closely the validity of the applicant's credentials. Most schools make a serious effort to uphold the dignity of the profession and to protect their own reputations by regulating the conduct of their students, but no experienced superintendent of nurses expects to escape from the disagreeable duty of deciding again and again in the course of a year whether certain unconventionalities may be overlooked or whether they merit dismissal.

Student nurses are sometimes dropped to avoid scandal injurious to the institution or to protect the good name of the profession. Immorality and grossly unconventional conduct are not, however, the only causes that lead to dismissal. A careless student may be guilty of some technical error that endangers the life of a patient. Another may be grossly negligent in her studies, highly temperamental, grossly insubordinate or unsympathetic toward and irritating to her patients, or she may be addicted to narcotic drugs or stimulants. It may be clear that the separation of a nurse from the school is desirable from the standpoint of everybody concerned. Her dismissal, however, may give rise to an entirely new problem if she is disinclined to abandon nursing and seeks to make a fresh start.

Be Tactful When Appraising the Nurse

When inquiry is made by another school or hospital about a nurse with a dubious record, what should be done? The bare recital of past errors may exclude from a professional career forever an intelligent woman who, chastened by experience, is determined to turn over a new leaf and is sincerely seeking to follow a course of honest achievement and genuine usefulness. On the other hand, the suppression of the facts of the previous career of the applicant may expose another hospital to dangers that it would be glad to avoid. The more mature superintendents of nurses are probably those who allow themselves the widest latitude in appraising the future usefulness of nurses whose errors can hardly be disregarded but which may in many instances be kept in the background without public detriment. Like an accomplished pianist, a hospital official must know when to use the soft pedal.

The doctrine of discreet silence has limitations that must not be overlooked by hospitals which are not free from public obligations. It may be contended that secrecy is justifiable whenever disclosure would do more harm than good or that secrecy may properly be used to protect the weak and unfortunate from the results of their errors or of circumstances beyond their control. These arguments, however, will not apply to hospitals that are secretive in regard to their own affairs for reasons of a purely selfish nature.

What the Hospital Often Conceals

Most hospitals are conscious of weaknesses of two kinds—deficiencies arising from the limitations of their resources, and faults or defects in organization or function for which the administration is largely responsible. The financially crippled hospital seldom hesitates to tell its troubles to the public. Its itching outstretched palm has become a familiar feature of American life, and the growth of voluntary hospitals in most of our urban communities testifies to the sympathy with which the appeals of hospitals have been received. But the hospital that falls far short of administrative efficiency is often tempted to conceal from view things of which it is just a little bit ashamed—doubtful policies, acts of favoritism, unwarranted extravagances and unsuccessful experiments.

The small special hospital which has within its system no germ of balanced or healthy growth is loath to admit its logical limitations. Its staff may be drifting further and further away from the main current of modern medicine, its patients may suffer numerous deprivations due to the absence of resources that only the general hospital can command, but these are facts that the hospital, motivated by a desire for self-preservation rather than by any urge toward complete growth or administrative perfection, is not eager to reveal. Hospitals that are unable to point with pride to the superior quality of their work are apt to look away from this phase of reality and to focus attention on the volume of their work.

It is not without reason that skillful public accountants often jeer at the financial reports of hospitals, for some hospital reports are not candid, while others are clumsy and inexpressive. It requires considerable skill and ingenuity to prepare a really illuminating report of the financial operations of a great hospital which derives its income from a wide variety of sources, including private room, ward and dispensary earnings, public grants, restricted and unrestricted capital funds, and contributions either to the

current general needs of the hospital or for specially designated purposes. The day may come when the American Hospital Association, which has already considered to some extent the problem of analytical hospital reporting, will develop a perfect system of hospital accounting and by means of a carefully concocted and widely advertised scheme of institutional grading, will bring such pressure to bear on hospitals as to assure the adoption of a suitable accounting system by all reputable hospitals.

A crying need of the hospital world is the development of a standard nomenclature, administrative, not clinical, to facilitate the study of national and international hospital problems and the comparison of hospital methods and results. The proposed International Hospital Association will undoubtedly attack this problem as one of its first tasks. An acceptable standardized nomenclature would put an end to the misunderstandings that arise from the unequal use of such terms as "cost per capita," "cost of construction per bed" and "cost of nursing service." Many years ago an appeal was made to the hospitals of New York City to add to their annual reports of patients admitted a classified list of patients rejected accompanied by explanatory notes. Without such reports it was impossible to compare the hospital resources of the city with its needs. The response to this appeal was not encouraging—only two hospitals out of a possible hundred adopted the suggestion. Was the failure of the other hospitals to respond affirmatively due to their inability to grasp the significance of the suggestion, to indifference to the general welfare or to deliberate intent to conceal facts which, while not exactly discreditable, could shed no luster on the hospital? I do not know, but I feel sure that many hospitals will continue to fall far short of perfection in their organization and work until they acquire a passionate desire to know the whole truth, and a willingness to tell it without reserve.

Colorful Walls Cheer Mental Patients in California

Bright colors on the interior walls of institutions for the mentally afflicted help to bring about better mental attitudes and may help toward cures among the patients, according to a statement by Earl E. Jensen, state director of institutions for California.

Drab grays are being replaced in California with pinks, yellows, greens, blues and other bright colors, he said, as the result of a year's experiment in the hospital at Napa.

"If you could have seen the faces of the patients at Napa a year ago when the walls were the conventional drab gray," said Mr. Jensen, "and could see them to-day since the walls have been tinted bright hues, you would

realize what a tremendous influence color can play. So successful has the experiment proved that we have been repainting the walls inside all of our six mental hospitals as rapidly as possible this summer.

"We use the light hues, avoiding dark blues, greens and browns, and especially red, which is known to have a distressing effect. Pinks, light blues and greens, yellows and tans, we have found, are those which have the most cheering effect on the patients. And even the nurses and other employees of the institutions are responding to the change. These institutions no longer are the drab depressing places they once were. We have great hopes that the colors will help us in effecting cures and in generally brightening the lives of those entrusted to our care."

Why Hospitals Should Maintain a Well Stocked Pharmacy

That hospitals, especially hospitals of any great size, must keep on hand a complete supply of drugs and be prepared to compound medicines, is emphasized in the *Bulletin of Lake View Hospital, Danville, Ill.*

This is necessary, says the *Bulletin*, because:

The modern hospital is expected to be ready always to meet any emergency.

The patient's treatment should be begun as soon after admission as possible.

The hospital can usually satisfy the preferences of its medical staff by maintaining its own drug stock.

It is certain that the best drugs available have been purchased.

New drugs find their way into hospital channels before they are placed on the open market.

It helps the hospitals to keep the total of the sick bill at the lowest possible figure.

Helping Ward Patients by Calling in the Referring Physician

Patients who are referred to the staff service in the wards of hospitals for observation or for suggested or actual treatment could be treated more efficiently if the attending physician were first called in to go over the patient and the history with the staff doctors, according to the *Medical Reporter*.

"These patients are those who either cannot afford to be treated by a private physician outside the hospital or who have not the accommodations for an illness. They are admitted to the free wards of the hospitals, and then begins the struggle to make an adequate diagnosis and to give proper treatment as indicated by the results of the case study, and at the same time to get the patient out of the hospital in as few "hospital" days as possible. Many times frequent investigative studies are made with little result in the final diagnosis.

"An attempt is made, of course, to refer the patient back to the doctor with a synopsis of findings and suggestions, but even this is often neglected. In many instances the doctor who referred the patient to the hospital finds the staff doctors' opinions differing radically from his diagnosis. Without doubt, much time would be saved, confusion prevented and a more accurate conception of the true character of the case obtained if the family physician were called in to consult with the staff."

The Rural Hospital—An Essential Link in Medical Progress

By HENRY J. SOUTHMAYD

Director, Division of Rural Hospitals, The Commonwealth Fund, New York City

DURING the last four years the Commonwealth Fund has helped to build six rural hospitals which are now in operation under local administration. This organization is studying the problems of these hospitals with close attention. On the basis of this small amount of experience I have been asked to prophesy the future of such institutions. This I cannot do, but it does seem pertinent to set down briefly the reasons that lead us to believe that rural hospitals form an essential link in medical and public health progress.

Hospitals in which the Commonwealth Fund is interested are fifty-bed institutions, fireproof and well equipped, each located in a town that forms the natural center of a district not having any large cities and with a population of from 30,000 to more than 100,000. The field of service of such a hospital varies. If the citizens are poor and tax resources are meager, it takes a larger area to support a hospital. If they are unfamiliar with hospital service it takes a greater number of them to make economical use of a fifty-bed plant, the smallest unit that is practicable. Roughly speaking, the area that can be conveniently served by a community hos-

pital in the country may be measured by a radius of thirty-five miles, an hour's drive over reasonably good roads.

If thirty to a hundred thousand people need and will support a hospital when they live together in a city, why should the same number of people lack similar advantages because they happen to be scattered over one or more counties? But one must go beyond that question. In 1928, less than 60 per cent of the counties in the United States had general hospitals for com-

munity use. The law of supply and demand has not called them into being, and the burden of proof is probably on those who foster them.

The Commonwealth Fund, then, is sponsoring such hospitals because it believes that in rural communities, medical practice and public health service are inadequate for the existing needs and that hospitals strategically located, properly equipped and intelligently directed can exert a helpful influence on both.

Let us take up first the question of medical service. Perhaps too much has been made of the fact that the ratio of physicians to rural population seems to be declining. The improvement of roads and the enormous in-



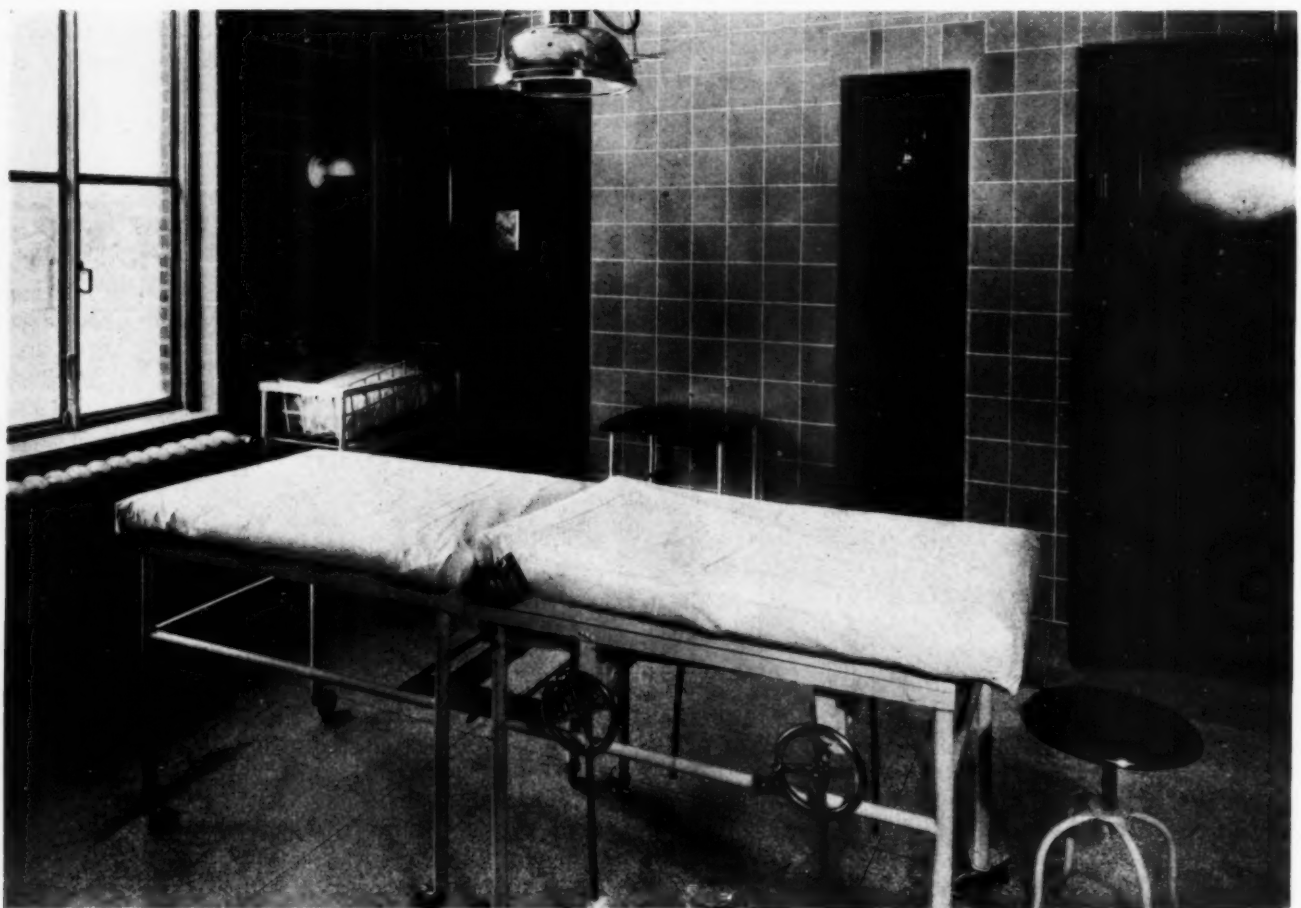
Anesthetics are administered by a full-time anesthetist employed by the rural hospital.

crease in the number of automobiles naturally enable the rural practitioner to cover more territory and reach more patients than he could a generation ago. More serious is the fact that the average age of physicians in rural communities seems to be increasing and that the percentage of qualified graduates of good medical schools who go into rural practice is falling. The content and method of medical education have been changing so rapidly in the last twenty years that this widening gap between the kind of medicine that is practiced in country communities and the kind that is now taught in the schools is a serious matter. In some parts of the country it is not uncommon to find that the majority of doctors serving a county have diplomas from defunct schools and have never come into definite contact with the present standards of medical training.

While I have spoken of medical service and public health work as though they were separate problems, they are inseparably connected. It is common knowledge that far too large a percentage of the rural population lacks even a minimum of public health protection, but it is possible that too much emphasis has been laid on the need of getting full-time health officers and

public health nurses and too little on building up general medical service. We have been looking to health officers and nurses to carry the load of introducing certain simple preventive measures into the community, as they must in most cases, but we have not always remembered that the number of ways in which the health officer can possibly affect the health of the community are fewer than is the case with the physician.

There are sharp differences of opinion among students of public health as to the ultimate division of responsibility between the public official and the private practitioner for such services as routine health examinations and immunizations against communicable disease. But I am sure that every sound program for the improvement of public health must depend to a great extent on the understanding and participation of the family physician. The prevailing inexperience of rural practitioners in phases of medicine that most concern the health officer is then one of the most serious barriers to bettering the public health, for doctors who are uninformed as to preventive measures are likely also to be indifferent to them. While the hospitals sponsored by the Commonwealth Fund are definitely linked with



The delivery room of the Detwiler Memorial Hospital, Wauseon, Ohio, shows the type of maternity equipment provided for the rural patients.



Organized emergency service is available at Southside Community Hospital, Farmville, Va.

plans for full-time health units and public health nursing, I prefer to emphasize here the underlying problem of medical service.

What can the rural hospital do in this situation? One of the important contributions it can make may not be felt for a good many years. It can help to bring modern medicine into the rural community by attracting competent young graduates of good schools into country practice. Let us see just how this may work.

Medical graduates are not unlike other ambitious young men—they want to go where the most money is to be made, where the most interesting life is to be had, and where the opportunities for professional satisfaction are greatest. For the majority of men, all these considerations point to the city. But country practice is far from unremunerative, and rising standards of rural living and the tendency toward larger rural practice may be sufficient to satisfy the financial ambitions of a newly-fledged physician who is not wholly a profit hunter. Tastes differ as to the things that make life interesting. The village doctor has a social standing and makes human contacts that are in some respects unique. As one young man remarked when he left the third largest city of the country for a New England village, "I've been working with doctors who know medicine; I want to work now with doctors who know people." The pull of rural living is a real one, and natural selection may be expected

to sift out of any group a number of competent young doctors who would prefer, other things being equal, to live in a small town or in the open country.

The wholesome desire for professional satisfaction, however, is not so easily gratified in the country. Here is the point at which other things are not equal. The student who has learned how and when to use the various aids to differential diagnosis that are supplied by the laboratory and the x-ray room, who is not afraid to make a basal metabolism test, who knows how to do and how not to do minor surgery and who does not think of a tonsillectomy as an afternoon's diversion for his patient; more especially the student who wishes to devote himself to major surgery and the more interesting developments of internal medicine, such a student is not going to bury himself, if he can help it, in a community where the only diagnostic and therapeutic facilities available are those he can afford to maintain in his own office and where the nearest city specialist is going to get his most interesting cases away from him.

It is at this point that the rural hospital seems to have a definite bearing on the situation. The hospitals that the Commonwealth Fund has sponsored have been planned for general service. Each has a suitably equipped operating room, with lighting of the latest type, a delivery room, a room for minor surgery and emergency service,

an autopsy room, a full-size x-ray machine and a well stocked laboratory. A technician trained to operate the x-ray machine and to perform all the usual procedures of a small laboratory is employed by the hospital.¹ There is a competent superintendent, usually a nurse with special administrative training or experience. A resident physician, usually in his third year of internship, cooperates with the medical staff. A local physician is given special postgraduate training to qualify him for service as roentgenologist.

How to Attract Doctors to Rural Parts

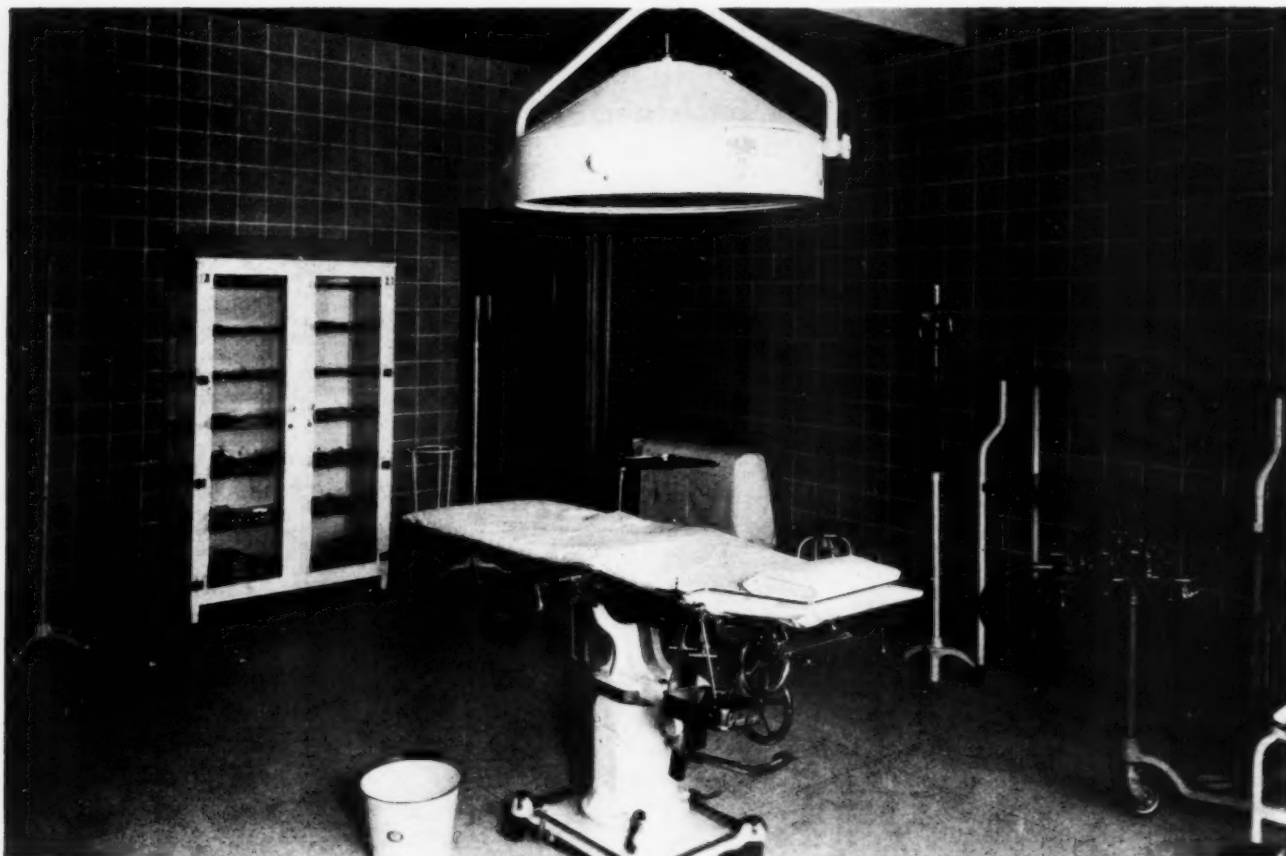
Some of the equipment regularly provided in these hospitals is probably more elaborate than is needed under existing standards of local practice. It has been deliberately furnished, however, in the belief that the best is not too good for the country and that sooner or later the opportunity to use it will attract the right user. It is worth noting that already, in the short span of time since these hospitals were opened, three well trained young men have entered practice in these six communities largely because of the presence of the hospital.

¹ This unusual combination of duties has been satisfactorily performed in these small hospitals. Naturally this could not be done where the volume of service is considerably larger.

This long range service seems a good reason for encouraging country communities to build hospitals. But what of the present and the immediate future? Is it desirable to put fifty hospital beds and a quantity of up-to-date equipment at the command of a group of rural practitioners of the older school?

Perhaps one can best answer this question by asking another: What are the alternatives to this type of institution? One of them is the proprietary hospital of ten or twelve beds, such as is often found in the county seat or market town. Such an institution may be good or bad, according to the proficiency and character of the physician who owns it. But at best it is completely out of public control. No disinterested group is responsible for it. Its procedure is private. It is rarely equipped to give free service. There is no channel by which the medical knowledge accumulated within its walls can be diffused through the community. Professional rivalries are likely to lead to the building of competing establishments and the duplication of equipment, which place an unnecessary burden on those who pay the fees.

The community hospital seems distinctly more desirable than these small infirmaries. It is



This rural hospital sponsored by the Commonwealth Fund has an operating room equipped with the newest type of apparatus.



The services of a full-time technician are available for assistance in the laboratory and the x-ray department of the rural hospital.

under more responsible control by representatives of the public. Its case records are subject to review and discussion by the staff. It has prudent regulations for the protection of its patients and the public; suitable routines can be enforced; surgical diagnoses can be checked by pathologic examinations. The character of the work done by physicians and surgeons is more open to observation. Relations can be regularly maintained with well qualified consultants. The opportunities for the exchange of information and for group progress in medical proficiency are materially increased. Free care can be given with organized public support.

There is another possible alternative. If there are no local hospital beds, the rich can go to the nearest city and the poor can go without. For the average family, the trip to the city is relatively expensive and inconvenient; the patient must often be separated from family and friends; the natural tendency is to postpone the decision, to use the hospital as little as possible, to do without an operation or without adequate diagnosis. Here, again, the alternative offered by the rural hospital seems the better one—to make it easy and natural to go to the hospital,

to preserve as much continuity as possible in the relations between physician and patient and to keep the patient's money and that of his visiting relatives in the community.

The withdrawal of those patients who can and do afford the cost of city hospitalization, moreover, is a serious loss to the local practitioner. The competition of city specialists is already his bugbear. He has no right to complain if he sees his most profitable patients leaving him when he cannot help them. His only resource, however, is to learn more and better medicine, and he finds himself in a vicious circle when the cases from which he might learn professionally and profit financially are snatched away because he does not know enough medicine to hold them. Perhaps it is to the advantage of the prosperous countryman to seek out the city specialist, but it is a grave question whether the medical interests of the community at large are going to be protected in the long run by the progressive depletion of rural medical skill and the progressive concentration of medical prestige and knowledge in the city.

In its hospital program, the Commonwealth Fund has made a definite effort to help the rural

practitioner break this vicious circle. It encourages each hospital, in the first place, to enter into permanent relations with a competent consultant staff. It requires the hospital to operate in accordance with the standards of the American College of Surgeons, and the emphasis that these standards place upon case records should be definitely educational, for only rarely does the doctor in the country keep records. It encourages regular staff meetings with serious discussion of clinical material. It provides the wherewithal for annual institutes for both physicians and nurses, which bring teachers of wide repute into the local group for two or three days of lectures and clinics. Most significantly of all, it offers five or six postgraduate fellowships each year that enable members of the local hospital staffs to pursue graduate study.

Under this plan seventy-five physicians have already gone from their small town practices to take courses of four months each at such university medical schools as those at Harvard, Columbia, Vanderbilt and Tulane, and at the New York Post-Graduate Medical School. This is a means of bringing rural practitioners into direct contact with modern medicine, and the letters that scholarship holders have written leave no doubt that in many cases the experience has been stimulating.

It is impossible to say how far these influences clustering around the rural hospital actually better current practice. But the drift of rural practice is backward. It lags further and further behind modern medicine. If the rural hospital can do something to check the drift in this generation and can lay the foundation for better rural medicine in the next generation, it is sound public policy to foster it.

Symposium on Convalescent and Chronic Care Is Published

This seems to be a period of "taking stock" in medicine, nursing and the allied professions. In analyzing the medical and nursing needs of the community, two groups seem to be conspicuously in need of more adequate service, the convalescent and the chronic, and that parallel and sometimes synonymous problem, the prolonged disability case.

For this reason, the "Symposium on Convalescent Care" is a particularly valuable publication. Published recently by the American Conference on Hospital Service, the booklet includes six papers and discussions on convalescent care, as given at the 1930 Conference on Hospital Service.

In introducing the subject at the recent meeting of the conference, Dr. Harry E. Mock, president of the conference, said, "We are pioneering in a new field of health service. As proof of that statement is the fact that this

is the first medical meeting that has ever been held anywhere in which the entire program has been devoted exclusively to considering the problems of care of convalescent patients.

"This conference is composed of nineteen national medical, hospital, nursing, and allied associations, all vitally interested in and all having something to contribute to the solution of the problems of the further care of the prolonged disability case after he leaves the hospital."

These Babies Begin Their Charitable Work Early

The Babies' Alumni of the Woman's Hospital, New York City, are philanthropic persons in that they are making possible free care in the maternity ward of the hospital for deserving poor mothers and their babies, says the *Trained Nurse and Hospital Review*.

The Babies' Alumni, founded in 1921, now has a membership of 5,152, representing almost every walk of life. The only requirement to join the alumni is that the member must have been born in the Woman's Hospital and have \$1. Since the alumni association was organized, a total of \$13,401.65 has been received in dues and donations.

Often a baby in the private nursery will donate money as a birth gift to help his less prosperous crib mates, and in several instances a fond relative has given a check large enough to cover a life's membership.

A greeting card is sent to the alumni on their birthdays, with a suggestion that they renew their memberships.

Miniature Golf Courses Planned for Veterans' Hospitals

Miniature golf courses will be established at veterans' hospitals wherever this facility is believed to be of benefit to patients, the United States Veterans' Bureau stated recently.

Besides having recreational value, the courses are expected to prove to be of benefit as another form of occupational therapy. Construction of courses at several hospitals already has been authorized, the bureau said in its statement.

While this step will be hailed by many of the patients as a recreational feature, its purpose is to afford another activity which may be definitely prescribed for certain patients as an aid to their recovery from diseases or injury and to assist in the institutional and social adjustment of individuals requiring long and definite periods of hospitalization.

Locations will be decided upon at the various hospitals and a general design for a miniature golf course will be supplied to the medical officer in charge for guidance in construction of the courses, which will be executed by bureau personnel using material on hand insofar as possible, necessary purchases being made under competitive proposals.

Construction of courses at several of the hospitals has already been authorized and it is planned to install them as promptly as possible at all other hospitals where in the opinion of the medical officers in charge this feature is desirable for ill veterans under their care.

Nurses, Patients and Hospital Pocketbooks

A Paper From the American Hospital Association Meeting

By LUCIUS R. WILSON, M.D.

Superintendent, John Sealy Hospital, Galveston, Tex.

MUCH has been written and said from one angle or another during the past few years on the subject, "Nurses, Patients and Pocketbooks," with the greater part of this discourse on nurses and patients and their pocketbooks. Another angle to this vexing problem is the hospital's pocketbook, and this is the angle with which all hospital administrators are greatly concerned.

While it is a hazardous undertaking to attempt to speak for all hospital administrators, I am going to venture a statement that the consensus of opinion of the members of this profession is that although there may be to-day too many women who style themselves nurses, there certainly are not too many well trained and qualified nurses. If all of the 200,000 young women who now possess diplomas in nursing were well qualified, I seriously doubt that the field would be overcrowded. Most of us can doubtless recall the times we scoured the country trying satisfactorily to fill a vacancy in a desirable nursing position that paid a good salary. If the field were overrun, would such situations be multiplied several times a year as many times as there are hospitals?

If we had 200,000 or more well educated nurses to-day, there would be work enough for all. When all the numerous lines of nursing employment found out where they could obtain good, faithful, dependable nursing, the demand would rapidly increase in the same way as would any demand for an essentially worth while service or product. Furthermore, it is reasonable to believe that the many branches of nursing service would greatly increase. After all, the nursing field, with the exception of actual bedside nursing, is a development of recent years and should not by now have reached its maximum development.

The Progressive Nurse Is Needed

It is true no doubt that the nurse whose only concern is to collect her pay and give as little effort and thought to her work as possible has an annual income of rather limited proportions. But such a situation is not limited to the nursing pro-

fession. The nurse who continually improves her nursing ability is seldom without work whether she chooses private, public health or institutional duty, and her yearly income affords a comfortable living plus a substantial saving.

Nurses are worth the remuneration they receive and future developments most likely will increase their income in proportion to their ability. Many states have passed laws specifying the minimum requirements for the educational background of applicants to schools of nursing, and it is to be hoped that all states will soon do this, making the minimum requirements at least four years of accredited high school work. In my state—Texas—the board of nurse examiners has adopted a ruling that nurses who have not had four years of accredited high school work cannot take the state examination. The result of this ruling is that several small hospital schools of nursing with entrance requirements of less than four years of high school work have been discontinued and the nursing in the hospitals has been assumed by graduate nurses. With the closing of these schools the flow of poorly trained nurses has been diminished.

The Patient Is Also Concerned

Not only are the staffs of schools of nursing and the doctors of the country interested in the problem of an adequate number of capable nurses, but the patients are equally concerned, although in many cases they are not aware of their concern in the problem. Many indeed are the patients whose recovery depends on nursing care. For this reason every individual is entitled to know that the nurse who takes care of some member of his family, whether that nurse is one of the hospital's regular staff or one obtained from a registry, is capable of carrying out the doctor's instructions and the approved nursing procedures that are taught in good schools of nursing. The only way he can be assured of this is by a uniform educational requirement such as prevails in medical schools that permit only the well qualified to practice their profession.

The patient is also vitally interested in the cost of nursing care. If his case is one that requires constant attention for twenty-four or forty-eight hours and after that only the care of the floor nurses, the financial burden frequently is of no consequence; but if he requires special nursing care over a period of weeks, he has a difficult problem to solve, and the hospital in many cases will be asked to help either by reducing its rates, by placing the patient in low priced accommodations where the income will be less than the per capita cost or by extending questionable long time credit. This puts both the hospital and the patient in a predicament. The hospital cannot put on more nurses to carry the burden of two or three such cases on each floor; neither can it reduce its rates to a losing level. The patient cannot pay the doctor, the nurse and the hospital.

Group nursing seems to offer the solution to such a problem. The hospital secures the services of a special nurse to look after a group of these patients and divides her charges among them. This is being done satisfactorily in many hospitals. Such a procedure can easily be developed to such an extent that the nurse need only be on duty eight hours, with three nurses covering the twenty-four hour period. By dividing the nurses' charges among a group of patients, each patient receives twenty-four hours of special nursing service at rates considerably lower than the charges for a private nurse. This plan does not provide for the patient who is so critically ill that the constant attention of one nurse every hour of the day is needed. Either he must pay or the hospital must make sacrifices. If the patient cannot pay, the latter is the only solution, and the hospital is confronted with the problem of providing adequate nursing care.

Changing Public Opinion

Some hospitals, if their school of nursing is adequate, cover these emergencies by placing additional pupil nurses on that floor so that the regular force is augmented to an extent that will ensure adequate care for the particular case. No attempt is made to charge the patient for this service, and no one student nurse assumes full care of the patient. This obviates the questionable practice of using student nurses as specials to increase the hospital's revenue.

Few indeed are the hospitals providing modern care for the sick that do not have a sizable deficit in hospital operation; yet the trend of thought to-day is that the hospital must provide everything needed for any case regardless of cost but that it must not make a charge for all its services beyond what would be considered a reasonable rate

for a room in many hotels, a rate that is below the actual per diem cost of the hospital. Most certainly these two ends cannot meet, and a deficit for which no apologies need be offered is inevitable.

The medical world realizes this, but the public in general does not, and public opinion is not helped by the distribution of articles appearing in many publications giving certain laymen's views on the high cost of hospital care, with many criticisms based on perhaps one contact with a hospital and no knowledge of its operation and its cost. These articles are numerous and each critic thinks it his duty to damn the institution rather than to investigate and learn that the best minds of the medical and hospital world have already spent and are still spending much time trying to solve the problems of the high cost of being ill.

Where Sacrifices Must Be Made

In working on the high cost of medical care only, the patient of moderate means seems to offer difficulties. In most localities provisions have been made for the wealthy and the poor, but the respectable, hard working citizens of the so-called middle class, which includes the bulk of our population, need consideration. They want to pay, yet their income will not permit them to pay the cost of being ill if the illness is prolonged. While prolonged illness is not the usual type, it happens too often to be ignored. In these cases, sacrifices must be made by the patient, the doctor and the hospital. While it sounds unreasonable, yet it is true that the doctor cannot charge a proportionate amount for a hard prolonged case of illness that he can for an acute case; and the doctors of to-day, as in days gone by, willingly reduce their bills and wait for their fees until the patient's financial as well as physical condition improves. The hospital does the same, and the patient who is in debt feels, quite correctly, that being ill is too expensive for persons of his circumstances. His illness, therefore, has been a losing proposition to all concerned.

Each year the sick of our country are going to hospitals in larger numbers than previously. This is as it should be, for the burden of caring for an ill member of the family in the crowded apartment of to-day is too much to place on the shoulders of the remainder of the family, and such homes are not equipped to render the needed service.

Compare the present day method of caring for the ill with that of a few years ago, when obstetrics, medicine, pediatrics and a great deal of surgery were done in homes instead of in the hospital. Then the equipment consisted of the

kitchen stove, the kitchen table, kitchen utensils and a few instruments carried by the doctor in his handbag. Asepsis was not vigilantly sought. In fact, the so-called laudable pus was desired. The mortality was high; and if death was avoided, the period of illness extended over weeks and sometimes months. A simple appendectomy required bed confinement of from three to four weeks. Pneumonia and typhoid patients were confined in their homes for months instead of weeks. Other diseases required proportionately long convalescences. While the cost of medical service in the home in dollars spent may not have been high, the cost in time and lost earning power was tremendous. When considered in this light, was not the cost of medical care in years past as expensive as to-day and were not the suffering of the patient and the worries of the family greater?

The development in hospital equipment has been as rapid as the advancement of the medical profession. In fact, the development has been so rapid that a special piece of equipment is needed for nearly every procedure. While this has led to better medical care, it also has increased its cost, but there is no argument but that the better care of patients is a desirable accomplishment even at an increased cost.

No person better knows the cost of providing these facilities than does the hospital director. If he has not provided them, he is promptly condemned. If he has provided them, they are accepted as a matter of course. How to pay for them is his problem.

Administrator Is Criticized Unfairly

In addition to providing the facilities with which the sick can be given every help toward recovery, the hospital has willingly undertaken additional community responsibilities, such as education and research. The modern hospital of to-day spends large sums on the education of medical students, interns, nurses, dietitians, technicians, dentists, social workers and members of the allied professions. It has become the center of medical research where both clinical material and laboratory material are available at all times, and in addition it is a community center for preventive medicine and public health. The benefits of these services are shared by all. It is proper that the cost should also be shared by all.

One might go on almost indefinitely touching on the many angles involving nurses and patients. If each one were investigated thoroughly, the hospital's pocketbook would become involved, and the more involved it becomes the greater is the deficit in hospital operation. Because of this deficit, the

hospital superintendent is often accused of poorly directing hospital finances. This criticism is unfair. The hospital superintendent is naturally vitally interested in hospital finances and pays particular attention to this feature of his work. He is always anxious to adopt any modern business feature that is applicable to the management of his institution. He directs a great deal of his energy to hospital finances, for unless revenue in adequate amounts is obtained, the hospital must cease to function.

Keeping the Deficit to a Minimum

Is it not time that the hospital's pocketbook was given a fair deal? Can the public expect hospitals to make money when that same public cannot pay the cost when it uses the hospital? It is only a matter of simple arithmetic to figure out that when the hospital is expected to and does spend more for the provision of every known product that will give its patients the greatest possible chance of recovery and in return must charge less than cost a loss in the deal must be taken. In view of this, is it not our duty to spend more time informing our patients about hospital affairs, thus avoiding the criticism so often heard that hospitals should make instead of lose money?

Since we must have a deficit, how can we keep it at a minimum? Perhaps the greatest reduction in a single item can be made by removing from the hospital's finances the burden of nursing education. The hospital should be the workshop in which nurses are trained as are medical students. But, should the hospital carry the expense of nursing education any more than it should carry the entire expense of medical education? This expense will increase as higher standards are adopted and unless it is removed from the hospital's budget it will increase the deficit.

A few schools of nursing connected with universities have separated themselves from the hospital's pocketbook, and I believe they are blazing the trail in nursing education to be followed by all others in the future. All schools of nursing cannot have university connections. Those without such connections should be organized as a separate educational unit of the hospital's activities and as such should receive their funds from sources distinct from the hospital.

It is remarkable that schools of nursing have done as well as they have when one considers that the hospital management is forced to divide with the school of nursing an income that is barely adequate to run the hospital, with the natural result that the school of nursing is provided with only the barest necessities and must struggle along as best it can. Separating the school of nursing from

the hospital's purse is a radical step, but the trend of events is pointing in that direction.

Removing from the hospital pocketbook the expense of nursing education together with the expense of other educational responsibilities will not fatten the purse that is flat from a combination of causes in which education plays only a part. The patient who cannot pay the cost of his care is the most ruinous item on the hospital books. How can we help him and the hospital? If all hospitals could obtain money from philanthropic individuals and organizations to build, equip and endow a hospital for such patients, the answer would be easy. Unfortunately this cannot be done at the present time by all hospitals. Can we call on the state for aid? This would be another step farther in the direction of state medicine which is a thing to be avoided, and I doubt the wisdom of mixing state politics and hospital finances, even though the state legislature could and would answer a plea from all hospitals for help. Can we get the money out of the patient when he does not have it? Indeed we cannot, and the practice of charging all the traffic will bear in an effort to do so would soon put the hospital in such a precarious position that to attempt to secure financial aid from outside sources would be futile.

The patient must be cared for and not charged beyond his means. The hospital should ascertain what the family can be reasonably expected to pay, remembering that the well members must live and that creating a debt requiring a lifetime to repay would forever keep that family out of its rightful place in society. When the amount has been ascertained, the hospital and the doctor should agree on an equitable division of this amount. The doctor is entitled to fair remuneration for his work as is the hospital, and neither should gain at a loss to the other. The staffs of some hospitals have agreed to such an arrangement and have received fair treatment and satisfaction.

Advantages of a Credit Plan

In the event the patient has possibilities of paying off a debt but has little ready money, should not the hospital and the doctor arrange a credit scheme on the monthly or weekly basis as do other businesses? While the idea of paying for things on the installment plan may be repulsive to some of us, yet if it is universally used for all luxuries and necessities of life, can it not be employed by the hospital as a means of paying for that most essential necessity and luxury, pursuit of life and health? Why should the hospital not draw up with its patients reasonable installment contracts,

secured, as any other business would have them secured, by the signatures of the employer, co-workers or relatives? Such a scheme surely would bring in revenue that otherwise might be lost in caring for the patient as a charity patient, a procedure that would cause him to lose some of his self-respect and add a loss to the hospital pocketbook. Exorbitant interest charges should not be considered in this connection.

The public should be informed on the cost of hospital care. This cannot be done by silently tolerating the publication of radical and rash articles in newspapers and magazines by persons uninformed on the subject. Hospital superintendents and others closely connected with hospital management should publish articles giving an accurate portrayal of hospital finances. Any opportunity to give a few moments' talk on the subject to interested groups should not be overlooked. If we all exerted ourselves along this line, the public would have an opportunity to know the facts, and instead of feeling that it is overcharged by hospitals, it would realize that hospital charges are more reasonable than the charges made for any other service it can obtain. And when once we gain the faith of our patients, financial support will follow.

Curtailling Extravagances

Patients' accounts, patients' attitudes toward the hospital and the hospital's pocketbook are not helped by the lack of economy on the part of the visiting staff. The extravagant use of dressings, medicine and laboratory service amounts to large sums of money. No hospital director ever wants to curtail the legitimate use of any hospital service, but he must exert himself to prevent the wasteful use of the hospital's facilities. There are many members of hospital staffs to-day who bring much embarrassment to the hospital's bank account by an improvident use of supplies. If every doctor could have a thorough course in hospital management, the hospitals would save many dollars through economy of supplies and labor.

I have not attempted to offer a solution to the many problems involving nurses, patients and hospital pocketbooks since I am convinced that the solution is not at hand and cannot be obtained by any one individual or any one group of individuals. To reach it will require many years and the combined efforts of nurses, patients, doctors and hospital administrators. Many phases of research must be carried out in the fields of education, financing and organization before the correct solution is found, and even then I doubt if everyone will be satisfied.

Judging Comparative Values of Kitchen Equipment—Part I

By VINCENT R. BLISS

Chicago

IF YOU ask ten persons the question, "What is the most economical grade of kitchen equipment to buy?" you will probably receive ten opinions, but few if any facts. Many experienced kitchen operators have formed general ideas on the subject but they can give surprisingly little definite information to support their views, and there is no evidence of any logical method for appraising value.

Can such a method of evaluation be found?

It is conceded that there are difficulties. Accurate information on performance has not been generally available. The length of serviceable life of equipment is found to vary according to the usage and care it receives. Durability and cost of upkeep depend upon a combination of qualities, such as design, construction, workmanship and materials, and the excellence of one may partially offset the weakness of another. Then, too, some of the most important values, such as sanitation and appearance, are not only hard to measure, but are to some extent matters of personal opinion.

Although the situation is complex it still is feasible, I believe, to apply businesslike reasoning to this problem.

A general analysis of kitchen equipment performance was therefore undertaken, and the initial findings are presented here in condensed form.

The objects of this kitchen equipment investigation were as follows:

To find a simple method or formula for mak-

ing specific numerical comparisons of value that can be applied in actual practice to assist in determining the grade of equipment that should be specified.

To gather reliable data concerning the cost and all-round performance of various grades of kitchen food service equipment.

To interpret these data in the form of comparisons of value for purposes of general information.

In carrying out this investigation, information and opinions were obtained from kitchen operators, equipment engineers and other competent

authorities, and the cooperation received was gratifying. While, as would be expected, a certain amount of variation in opinion was encountered, there was little or no disagreement concerning any fundamental points.

From the mass of information obtained, a number of definite comparisons have been compiled, touching upon some of the more important items of kitchen equipment. Based as they are upon the composite judgment of a number of experienced men, these comparisons are believed to be fair and dependable, and from them a clearer idea

An Investment Policy

HOSPITALS and allied institutions invest many millions of dollars annually in food service equipment. Such fixtures are purchased with a desire for permanence and it is expected that they will endure for the life of the building in which they are installed. It is beyond question, however, that there is a large difference in volume between the grades of equipment, which is reflected in depreciation, obsolescence, maintenance and operating costs as well as in general satisfaction. Choosing the class of equipment to be specified is therefore not simply a buying decision, but a matter of investment policy or of general operating policy. The only sound basis for this decision is to make an appraisal of comparative values before specifications are drawn.

may be gained of the value received for the dollar paid. If it does nothing more, however, this study offers a method of valuation in which all important elements are considered and which can be applied in a practical way.

To get the good out of this material the basis upon which the investigation was made must be

understood. This basis was as follows:

1. It was assumed at the outset that the prime object was to determine what grade of equipment is most economical, in other words, to find the level of quality upon which competitive bids should be secured.

2. It was taken for granted that anyone who was trying to buy intelligently would insist that competitive quotations represent identical construction, consistent with the standards of workmanship of the well established manufacturers.

3. Under these circumstances the problem is simplified into a comparison of equipment as manufactured of different materials, for with design and construction the same, material is the thing that will determine serviceability and value.

4. In order to keep within practical bounds, the investigation was limited to a fairly small group of the most important items of equipment. The comparisons thus made, however, can be applied easily to other similar products.

5. While it is true that the life of equipment depends upon the severity with which it is used and the care with which it is kept in condition, the comparisons were based upon ordinary operating conditions, representative of the majority of institutions.

After considerable study, it was decided that the elements to be considered in rating the performance of kitchen equipment can be reduced

to five: original cost; length of serviceable life; cost of cleaning, upkeep and repair; value of sanitary properties; value of appearance.

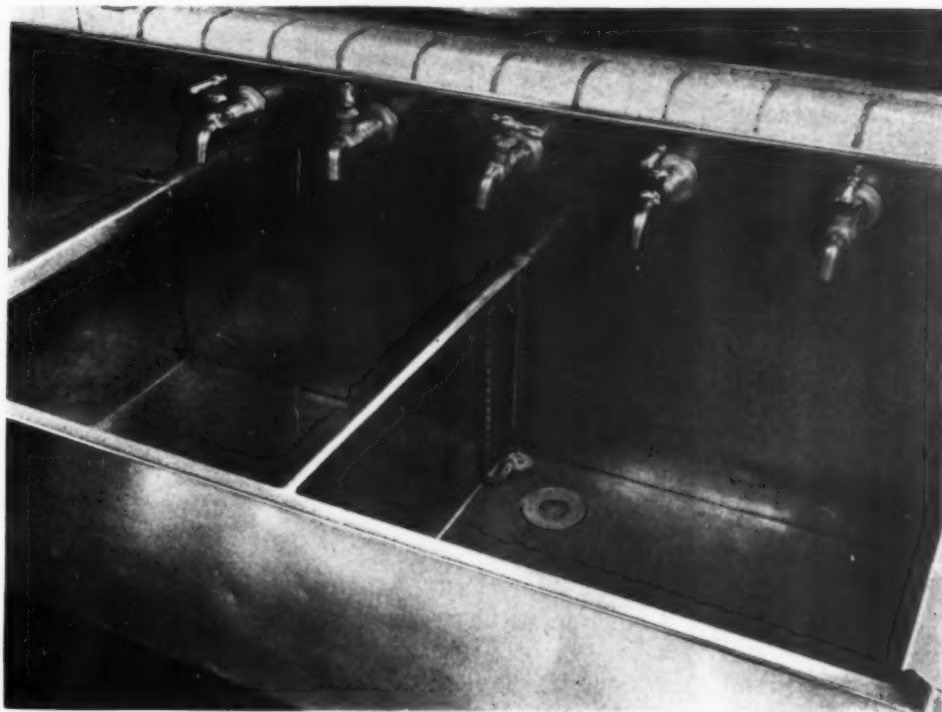
The importance of these factors is not always the same; there are differences depending upon the kind of fixture and also upon the class of institution. In some cases sheer durability will outweigh everything else, while in others, sanitation, cost of maintenance or appearance will be of greater importance. It is often remarked that general statements as to length of serviceable life of equipment are difficult to make because so much depends upon the treatment received and the amount of care expended to keep equipment in good condition. This is true to a degree, but it should be remembered that careful treatment and constant upkeep also cost money, and this in some cases more than offsets the increased length of life. The ideal equipment is that which lasts indefinitely and keeps its properties in spite of hard usage and without laborious and costly maintenance.

In setting values upon equipment, attention was paid to all of these points, and in line with the purpose of the investigation an effort was made to reduce everything to figures or percentages. This, however, was not a simple task for each man has his own idea as to the dollars and cents value of sanitation and appearance, and even in the case of cleaning and upkeep, no complete figures on costs have ever been available.



A sink that has been in use for only four years in a Chicago restaurant shows the pitting that is the result of the top surface of the metal wearing off, thus making it easy for dirt and grease to collect.

This photograph, taken fourteen years after the sink was installed in Ida Noyes Hall, the University of Chicago, shows the excellent condition of the sink that is said to have received the hardest usage of any in the kitchen.



For this reason two comparisons have been given in many instances, one being based simply upon cost *versus* length of life, and the other on all other factors, each of which is given a rating.

What Metals and Materials Were Studied

As to the materials considered in the comparisons, these may be divided into several groups. The first group includes plain steel, galvanized steel and blue-black or Wellsville steel; the second, copper in its various forms—plain, nickel plated or retinned, and the third, miscellaneous materials, such as glass, porcelain and enameled steel. The fourth group is opposed to all the others and includes the noncorrosive white alloy metals. The data on alloy metals in this study are based upon the performance of monel metal, the only material of its class that has been in use for a sufficient number of years to permit full observation. It may be safely assumed, however, that other noncorrosive white alloys of high nickel content will give substantially the same combination of qualities.

In all cases the fixtures compared are assumed to be identical in design and operation, so that such elements as utility, efficiency or fuel economy will not confuse the findings. To a large extent this is also true of construction, although this is not universally so, for the natural properties of materials often influence manufacturing processes. The generally accepted method of substantial construction has therefore been used in each case.

Let us now proceed to the first comparison in

which the method of rating that has been adopted is briefly explained.

Two grades of sinks were considered, galvanized steel and noncorrosive white alloy metal.

An investigation among experienced kitchen operators and equipment engineers indicates that the serviceable life of a galvanized steel sink is between five and ten years, the consensus being seven years under average conditions. The same group of authorities expressed the unanimous opinion that the life of white alloy metal sinks will equal that of the building in which they are installed, or approximately thirty-five years.

An examination of the prevailing market prices shows that white alloy metal sinks will cost the user approximately three and one-half times as much as those made of galvanized steel.

From these facts only we therefore reach the following comparison of values:

| | Galvan- ized Steel Sinks | Noncorrosive Alloy Metal Sinks |
|---|--------------------------------|--------------------------------------|
| Length of serviceable life | 7 years | 35 years |
| Original cost | \$50.00 | \$175.00 |
| Cost per year | 7.14 | 5.00 |
| Value per dollar of cost (based on length of life only) | 70% | 100% |

But there are other points to consider. Let us now see what bearing they will have upon our comparison.

The general experience concerning white alloy metal sinks is that they require little labor to keep clean, and retain their original condition

without deterioration throughout their life. These alloys are highly corrosion resisting and their surface is so hard and smooth that dirt finds little foothold. Their great strength and toughness enable them to withstand the severest usage so that repairs and maintenance costs are negligible. With galvanized steel sinks, however, the story is quite different. Galvanizing is intended to give protection against rust and corrosion, but this coating is made of a soft metal which is readily chipped or worn away. Consequently, a galvanized steel sink begins to deteriorate from the moment it is installed and it is estimated that the galvanizing will begin to wear off seriously in from six months to two years. When this occurs the base metal is at once exposed to rust. The roughness of the galvanized surface and of the exposed steel causes dirt and grease to accumulate and makes thorough cleaning difficult. Accurate figures on upkeep cost are not available, but from the evidence it is believed fair to place the value of white alloy metal sinks at 100 per cent and of galvanized steel sinks at 20 per cent as a comparison of their economy of cleaning and upkeep.

Alloy Metal Sink Is Most Sanitary

Whether a sink is used for vegetable preparation, meats, pot and pan washing or other purposes, sanitation is certainly of the utmost importance. Galvanized steel and alloy metal represent two extremes of value in this respect. Compared with the sanitary properties of plumbing fixtures used in other parts of the hospital, galvanized steel sinks are a generation behind the times. The alloy metal sink, in contrast, offers a distinct advance in sanitary conditions, for it is not only the equal of other commercial or domestic plumbing fixtures when new, but keeps its properties without deterioration in spite of the severest usage. In expressing comparative values on these two types of sinks on the score of sanitation, therefore, we shall adopt the figures: galvanized steel sinks, 10 per cent; noncorrosive white alloy metal sinks, 100 per cent.

Galvanized Steel Versus Alloy Metal

There can be little comparison between the two classes of sinks on the score of appearance, especially after a short period of service. Opinions on the value of appearance may differ, but most will agree with the rating: galvanized steel sinks, 50 per cent; white alloy metal sinks, 100 per cent.

Having considered each of the main points of difference between galvanized steel and noncorrosive white alloy metal sinks, we can now form a combined comparison of value. This, based

upon the evidence given above, will be as follows:

| | <i>Galvanized Steel Sinks</i> | <i>Noncorrosive Alloy Metal Sinks</i> |
|---|-------------------------------|---------------------------------------|
| Value per dollar of cost (based on length of serviceable life only) . . | 70% | 100% |
| Economy of cleaning and upkeep | 20% | 100% |
| Sanitary value | 10% | 100% |
| Value of appearance . . | 50% | 100% |
| Average value per dollar | 37½% | 100% |

Let us now compare the values of three types of urn stands—those with tops of noncorrosive white alloy metal, of polished copper and of nickel plated copper. The latter are not widely used but are included in the comparison for the sake of completeness.

The serviceable life of polished copper top urn stands is variously given as from five to fifteen years, and the same is true for nickel plated copper. To be conservative the highest figure, fifteen years, will be used. A white alloy metal urn stand top is considered as having an indefinitely long life and in some instances it will outlast the stand or base upon which it is mounted. For this comparison, therefore, its life will be considered as twenty-five years. In urn stands with warmer bases the difference in price between copper and alloy metal top fixtures is of negligible importance. In order to make our comparison as conservative as possible, therefore, we have based our cost figures upon urn trays mounted on an open stand. For such urn stands the price quoted for alloy metal by one large manufacturer is about 20 per cent more than for polished copper with nickel plated copper in between.

The following is the comparison we reach, based upon length of life alone:

| | <i>Polished Copper Top</i> | <i>Nickel Plated Copper Top</i> | <i>Noncor. White Alloy Metal Top</i> |
|---|----------------------------|---------------------------------|--------------------------------------|
| Length of serviceable life | 15 years | 15 years | 25 years |
| Original cost | \$70.00 | \$80.00 | \$85.00 |
| Cost per year | 4.66 | 5.33 | 3.40 |
| Value per dollar of cost (based on length of life only) | 73% | 64% | 100% |

Decisive as these figures are, there are still three other important points to consider. Let us see what they add to the comparison.

Copper is a metal that is easily corroded and discolored, which means that it must be given



Kitchen equipment in the Henry Ford Hospital, Detroit, was chosen for permanence, convenience, appearance and sanitary properties.

careful and frequent polishing. Its softness makes it easy to dent and scratch, which adds to the work of cleaning and general upkeep. A nickel plated copper top does not tarnish so quickly, and theoretically this plating should reduce upkeep costs. In actual experience, however, it is only a short time before the nickel plating will wear off in spots, exposing the copper. In view of this the cleaning and upkeep of a nickel plated copper top urn stand may be considered as approximately the same as one having a polished copper top. This cost of upkeep, incidentally, increases with age. Noncorrosive white alloy metal urn stand tops require but a small amount of attention, and the metal retains its original condition throughout the life of the fixture. Therefore the following is considered a fair comparison as to economy of cleaning and upkeep: white alloy metal top urn stands, 100 per cent; polished copper, 20 per cent; nickel plated copper, 20 per cent.

The ease with which copper corrodes and forms injurious substances rules heavily against it from the standpoint of sanitation, and the same is true of nickel plated copper, except that corrosion is delayed for a time. The relative sanitary values of these three types of urn stands may therefore be given the same comparative ratings as were used for economy of cleaning and upkeep.

Alloy metal is far above copper in appearance, and its superiority increases with time. Nickel plated copper looks well when new, but when the plating begins to wear away, the result is worse than if plain polished copper had been used, and

for this reason nickel plated copper is ranked lower.

Viewing all of these qualities together, we arrive at the following comparison of urn stand values:

| | Polished Copper Top | Nickel Plated Copper Top | Noncor. White Alloy Metal Top |
|---|------------------------|-----------------------------------|--|
| Value per dollar of cost (based on length of serviceable life) .. | 73% | 64% | 100% |
| Economy of cleaning and upkeep. | 20% | 20% | 100% |
| Sanitary value | 20% | 20% | 100% |
| Value of appearance .. | 25% | 20% | 100% |
| Average value per dollar . | 34½% | 31% | 100% |

In view of such an overwhelming advantage for alloy metal, it is not surprising to hear that copper top urn stands with or without nickel plating are rapidly becoming obsolete, except for the cheapest type of equipment.

The three types of steam tables considered were open stand fixtures having tops of polished copper, of nickel plated copper and of noncorrosive white alloy metal. This comparison works out the same in most respects as for urn stands, although the difference in price between copper and alloy metal top steam tables is a little greater because of the accessories involved. Based upon

length of serviceable life and original cost, the following comparison is reached:

| | <i>Polished Copper Top</i> | <i>Nickel Plated Copper Top</i> | <i>Noncor. White Alloy Metal Top</i> |
|---|--------------------------------|---|--|
| Length of serviceable life ... | 15 years | 15 years | 25 years |
| Original cost . | \$120.00 | \$135.00 | \$160.00 |
| Cost per year. | 8.00 | 9.00 | 6.40 |
| Value per dollar of cost (based on length of life only) | 80% | 71% | 100% |

As was the case with urn stands the elements of economy in cleaning and upkeep, sanitary value and appearance should be given much consideration. The ratings on these points will be the same for steam tables as for urn stands, except that the sanitary values of polished copper and nickel plated top steam tables are figured at 15 per cent as against 100 per cent for alloy metal due to the increased importance of sanitation in any fixture used for the handling of food. In comparing steam table values, therefore, we find the following:

| | <i>Polished Copper Top</i> | <i>Nickel Plated Copper Top</i> | <i>Noncor. White Alloy Metal Top</i> |
|--|--------------------------------|---|--|
| Value per dollar of cost (based on length of serviceable life only) .. | 80% | 71% | 100% |
| Economy of cleaning and upkeep | 20% | 20% | 100% |
| Sanitary value | 15% | 15% | 100% |
| Value of appearance .. | 25% | 20% | 100% |
| Average value per dollar . | 35% | 31½% | 100% |

All steam tables in this comparison are considered as having tinned copper water pans, seamed and soldered. A superior construction makes use of alloy metal water pans with welded seams and this is more economical both because of its longer life and its lower upkeep cost.

With regard to coffee urn values the thought here is to compare nickel plated copper urns of seamed and soldered construction with white alloy metal urns made by the newer welding processes. There is so wide a variation in quality among copper urns, however, that it has been considered necessary to include two grades, the first, which we shall call Grade A, being a high

grade product, and the second, Grade B, a popular priced urn of less substantial construction. The prices used here are based on quotations for urn batteries, as given by a representative manufacturer, and it should be mentioned that the higher price of the alloy metal product is partially caused by the heavier gauge of metal used in its construction.

When calculating the length of serviceable life of urns, the element of damage from carelessness or neglect must be taken into consideration, for such a thing is of all too frequent occurrence. Copper urns are seriously damaged by burn-outs or collapsing, but the alloy metal type with welded construction and heavier material is so much stronger that there is small likelihood of any serious consequences from careless operation. Bearing this in mind, the lengths of life given below are considered a fair comparison:

| | <i>Grade B Low Priced N. P. Copper Urn Battery</i> | <i>Grade A High Grade N. P. Copper Urn Battery</i> | <i>Welded White Alloy Metal Urn Battery</i> |
|---|--|--|---|
| Length of serviceable life ... | 5 years | 17 years | 30 years |
| Original cost . | \$110.00 | \$205.00 | \$310.00 |
| Cost per year. | 22.00 | 12.06 | 10.33 |
| Value per dollar of cost (based on length of life only) | 46.9% | 85.7% | 100% |

The problem of repairs on account of damage caused by accident or neglect makes cost of upkeep an important point in determining comparative urn values. Gas heated copper urns, if allowed to run dry, are quickly burned out, for the solder used in their construction melts at a fairly low heat. The result is a big repair bill if not the actual destruction of the urn, in addition to which there may be a serious interference with service. One experienced engineer stated that at least one out of every four gas heated urns is burned out at least once during its life and sometimes more frequently. Steam heated copper urns are liable to serious damage through collapsing if cold water is too suddenly admitted. Such accidents are, of course, more likely to work serious harm to a low priced urn of light construction than to a high grade copper urn. Non-corrosive white alloy metal urns are now being made by welding, which enables them to withstand intense heat without damage, and the greater strength of the alloy metal offers so effective a protection against collapsing that the

danger of failure from such causes need scarcely be considered. Alloy metal urns also offer a saving in labor of cleaning. It is estimated that cost of cleaning, repair and maintenance of monel metal urns is approximately one-fifth the expense for high grade copper on an average throughout their lives, and is even lower when compared with lightly constructed copper urns.

Choosing Urns

There is also a difference in the sanitary value of the urns, a thing that is of especial importance in connection with hot water urns or the hot water compartments of combination urns. Copper ranks lower than alloy metal for although the former is protected with an inner coating of tin, this may become damaged in one way or another allowing the easily corroded copper to be exposed to the action of water. As to appearance there may not be a great deal to choose between the high grade copper urn and the one of white alloy metal construction when both are new. Copper, however, is easily dented or scarred, and after a number of years of polishing the nickel plating may become worn off in spots.

The following is a summary of comparative values:

| | <i>Grade B Low Priced N. P. Copper</i> | <i>Grade A High Grade N. P. Copper</i> | <i>Welded Noncor. White Alloy Metal</i> |
|--|--|--|---|
| Value per dollar of cost (based on length of serviceable life only) .. | 46.9% | 85.7% | 100% |
| Economy of cleaning, upkeep and repair | 15.0% | 20.0% | 100% |
| Sanitary value | 40.0% | 60.0% | 100% |
| Value of appearance ... | 50.0% | 75.0% | 100% |
| Average value per dollar . | 38.0% | 60.1% | 100% |

This comparison is considered one of the most significant of the entire series for it bears upon a new development in urn construction which is being given wide study. The original price of a welded alloy metal urn is higher than that for types of good construction previously made, (although costs will undoubtedly be reduced as production increases), but it is the opinion of some experienced operators that this additional investment is more than justified purely on the basis of insurance against costly repair bills and interruption of service.

Personality as Well as Disease Will Be Studied in This Hospital

"The study of the individual patient in the light of his personality as well as of his disease, and the adjustment of his environment in conformity to his individual characteristics, mark the new mode in hospital administration," is the gist of an announcement from the sponsors of a new hospital to be built in the Litchfield Hills at Cornwall, Conn. The hospital will attempt to solve two distinctive problems—the increasing cost of illness to the patient and the hospital, and the adequate handling of the patient from a psychological point of view, says the *Survey* in describing the new project.

The group interested in the hospital, which is incorporated as a nonprofit making institution, believes that administrative economies can be made in a small hospital and that a personal and intimate relation can be maintained with the individual patient. There will be only forty beds in the hospital, primarily for cases in which convalescence is prolonged, taken from the cities and the near-by country. Many patients will be treated free; those who can afford to pay will pay.

The fact that the hospital will be in the country makes possible the provision of gardening and similar activities for patients able to profit by them, in addition to the more usual forms of schooling used in hospitals when a long stay is necessary. By these, as well as by a choice of patients who can profit by companionship with one another, it is hoped to facilitate the readjustments required by prolonged illness and to prevent the development of neuroses that often arise under such circumstances to hamper a patient's whole later life.

Better Supervision of Prison Hospital Work Is Sought

A more intimate knowledge of the mental characteristics of prisoners should contribute to a better understanding of several features of the present correctional systems generally, according to a statement issued by the Public Health Service recently. This will be brought about, it is hoped, by the supervision of hospital work in the prisons by the Public Health Service, it was stated.

"It is obvious," says the statement, "that the inmates of prisons are subject to the same intercurrent physical and mental illnesses, diseases, or defects, as are seen among those that comprise the general population. A properly organized prison medical service, therefore, must be both general and special in character to meet these needs.

"A well organized medical service in a modern prison can contribute to the welfare of inmates and employees in ways other than those mentioned, by rendering advice and counsel respecting sanitation and personal hygiene; by helping to organize and guide recreational, educational, occupational and vocational activities with a view to promoting the health of both inmates and employees, and by giving assistance and advice for maintaining a wholesome and well balanced dietary.

"The chief medical officer of a large modern prison has an important and specialized duty to perform, and one requiring special training, administrative ability, tact and judgment, and adequate assistance is necessary for him."

Fire Insurance Rates and How They May Be Lowered

By LOUIS WIEDERHOLD, JR.

Secretary, Underwriters' Association of the Middle Department, Philadelphia

THE hospital inspection service with which practically all hospital executives are familiar was inaugurated by the National Board of Fire Underwriters, and is a service that is apart and distinct from the usual activities of a rate making bureau. The National Board of Fire Underwriters, composed of practically all the leading stock fire insurance companies in the United States, after conference with the National Hospital Association, volunteered this service for philanthropic reasons. After we have inspected the hospital, we recommend to the management in clear, nontechnical language changes and improvements that we feel would better safeguard the hospital's patients and property.

Many of these recommendations cover items that have no bearing upon the hospital's fire insurance rates. From a purely selfish standpoint we are not interested in the absence of properly erected fire escapes or adequate exits for the patients. It is these items and many others that we are attempting to have the hospital recognize and correct. Hospitals properly safeguarded against fire and explosion hazards are not only humane; they are good business propositions as well.

This inspection service is all being rendered without a cent's worth of cost to the hospitals. In the territory that comprises the state of Pennsylvania outside of the cities of Philadelphia and Pittsburgh and what is known as the Philadelphia Suburban, such a service costs from \$10,000 to \$15,000. It may be seen, therefore, that the expense is no small item.

Wherein Fire and Life Rates Differ

Now for a brief word on rate making.

It is to be regretted that it is not possible to compute fire insurance rates by such scientific methods as are available in life insurance practice. Life insurance premiums are regulated by a mortality table directly influenced by the immutable laws of nature, and the actuary can tell to a cent what each class of any particular age will cost from year to year.

Unfortunately, this is not true of fire insurance. There are innumerable conditions and influences

that make so-called scientific fire insurance rates impossible. All that underwriting can do and the best that it can do is to take a number of hospitals in a given area, large enough to form an average, and to estimate that the loss cost in that particular area has been so much. To measure physical differences in structure, schedules are employed.

Cooperating With the Administrator

Not all refinements that may have a bearing as direct fire producing agencies or that may contribute to the spread of fire are incorporated in schedules, for the reason that they would prove cumbersome and impracticable and would fail to compensate for the expense of application. This problem is probably analogous to many problems that confront the hospital administrator. It would be rather unreasonable for the patient to expect the hospital management to differentiate in the cost of rooms because of the incorporation or the elimination of certain items. In framing these schedules the National Board of Fire Underwriters has included all of the more important items, and if the result is not scientific (because science presupposes actual measurement, and this is not claimed for the results obtained under any rating schedule), it is impartial. What underwriting is striving to accomplish is to measure the hospital's hazards impartially.

No doubt the administrator who is familiar with the items that enter into the makeup of his own rate may compare the results with the rate that applies to the hospital of his neighbor. He may even consider that the more highly rated property is in some respects better than that which enjoys a lower insurance rate. Possibly that is true, but the particular feature that influences his opinion may not be of a nature that would have any effect upon the fire insurance rate from a practicable standpoint.

The time for the administrator to begin thinking of fire insurance rates is when he is making his plans for a new hospital or for additions or extensions. When he makes such plans he is beginning to compile his fire insurance rate. This is the stage when we underwriters would welcome

the opportunity to give any desired information. If the administrator is undecided about whether a certain type of construction is going to affect his fire insurance rate, he should not hesitate to ask us about it. He may write to us and submit his plans or, if he wishes, we will send an inspector to examine the plans and frankly point out the features that are likely to affect the fire cost. Many of these important features may be easily and inexpensively provided for during the constructive period, whereas after the completion of the building they might prove impracticable.

Recently we revised our schedule applying to hospitals in Pennsylvania, a revision that will produce an average considerably lower than the rate now in effect. This reduction was made possible because of the record that had been kept by the National Board of Fire Underwriters indicating that the loss cost over a period of years seemed to justify a lower figure. This schedule has been applied to a number of hospitals and will be applied to all as rapidly as possible.

We have made an analysis of some of the more important features of those hospitals to which the revised schedule has been applied and the results are interesting.

Fire Resistive Construction Urged

In this territory we have 175 hospitals, forty-four of which are included in the analysis. Of the forty-four, fourteen are listed as fire resistive.

The underwriter knows a structure to be fire resistive or fireproof only when it is constructed throughout of approved incombustible materials. Of the fourteen hospitals listed as being fire resistive, six have wooden roofs.

A building that is constructed of stone, brick or concrete with incombustible floors and stairways, having either an all wood roof or planks on steel supports, does not constitute either practically or in underwriting parlance a fire resistive or fireproof structure. Such a structure, however, does allow additional time for the removal of the patients within it, which admittedly is a factor.

In the matter of the application of the schedule, conditions are charged for as they exist. If we did not believe that the interests of the insured and the insurer were mutual, we should not urge the better type of construction. The charge for a wooden plank roof on an otherwise fire resistive building or for a shingle roof instead of slate is largely a matter of routine. The underwriters would much prefer to insure property on which superior construction produces a low rate than improperly constructed buildings at a high rate.

There are no convincing reasons for the preva-

lence in any state of the wooden roof type of construction. It is a shame that any state has laws that permit the erection of public school or institutional properties out of anything but fire resistive materials.

If the architect advises a combustible roof and the administrator is influenced by a question of expense, at least he should take time to ascertain the added insurance cost before he makes a final decision.

Another Deficiency

We frequently find buildings of fire resistive construction that communicate with sections of ordinary construction, with openings protected with either single fire doors or without any protection at all. During construction it is a simple matter to provide proper cut-offs for communications, but if these are left until after the building is completed, the difficulty is greater and the expense is increased.

Another deficiency that is a factor in building fire insurance rates, is inadequate fire extinguishing equipment. One would naturally think that in hospitals first-aid fire protection equipment would not be overlooked since it is not particularly expensive. Concentration on problems that attend successful hospital management however, may have a tendency to sidetrack seemingly minor features.

Twenty-seven of the forty-four hospitals studied carry a charge for an inadequate equipment of fire extinguishers. Thirty-six, or 80 per cent, have a charge for absence of standpipe and hose. This is another device that is more easily installed at the time of building than afterward. In twenty-seven hospitals, or 60 per cent, we found non-standard film storage.

Why a Night Watchman Should Be Kept

In forty hospitals, or 90 per cent, a night watchman was not kept, or if he was kept his rounds were not registered on a clock. Some persons may take exception to the night watchman requirement but underwriters believe it to be a necessity. A watchman, if he is properly trained, performs certain specific and well defined duties that cannot be successfully dovetailed with other responsibilities. We do not mean that a watchman should tramp through wards and private rooms or sections that are constantly under supervision, but he should look into the nooks and crannies that are only infrequently visited. The administrator may tell us that his hospital is operating day and night and that an engineer or some other person is always in the office. This, however, does not constitute adequate

watchman service. Underwriting experience has never justified the admission that continuous operation could be accepted in lieu of watchman service.

The all important question in dealing with adequate protection in hospitals is the installation of automatic sprinklers. The automatic sprinkler properly installed and given systematic supervision has fully demonstrated its adequacy and efficiency as a fire extinguishing device. In this respect it heads the list and its introduction is well worth the consideration of hospital authorities either at the time new construction is planned or in existing buildings. Rate reduction in buildings of ordinary construction is large. We do not say that sprinklers should necessarily be installed in the wards, operating rooms and private rooms, but we do maintain that they should be in sections such as basements and lofts in which there are greater possibilities of fire hazard.

In connection with the subject of sprinklers, the hospital authorities are again invited to confer with the rating organization. Without cost, we will survey the property, decide whether the water supply is adequate for sprinkler protection and quote a rate that will be effective when the installation is completed. We will also check the plans of the company making the installation to make sure that all details are within the established rules of the National Board of Fire Underwriters, and after the equipment is completed and inspected we will issue a certificate to the effect that the standard requirements have been met.

Advantages of Acetate Film

The use of acetate or nitrate films in the x-ray laboratory should also be considered. Even if the acetate film costs considerably more than the nitrate, the question of cost should not deter the administrator from introducing a film that has such an important bearing upon fire and explosion hazards. Sensitivity, flexibility or other technical differences may be important considerations, but films that have a nitrate base should be handled with the same care that is accorded gunpowder or dynamite. For fifteen years the National Fire Protection Association and the National Board of Fire Underwriters have been endeavoring to influence the motion picture industry to discard the nitrate stock in favor of acetate film.

Neither the National Board of Fire Underwriters nor the Underwriters' Laboratories in Chicago is interested in the manufacture or sale of films or of any other device that may pass

through the laboratories. The laboratory is only a testing station, and if there is any doubt in the mind of the hospital executive as to the danger in the handling, storage or use of nitrate film, let him write direct to the Underwriters' Laboratories. This organization will cheerfully give him the results of their tests. When combustion is sustained in a substance after it has been submerged in water, it is substantial proof that it is a dangerous fire producing agent.

Should Employees Live Within the Hospital?

Whether or not employees should live within the hospital is a question that confronts every hospital board and superintendent when a new institution is contemplated. With fireproof construction costs varying as they do from seventy-five cents to \$1.05 a cubic foot, a contributing community may well be concerned about the proper solution to this query. Nor can the best informed authorities evolve any adequate answer.

In a hospital a considerable distance from areas in which hospital help may be secured, it may be necessary and advisable for housing facilities to be constructed sufficient to care for a majority of the institution's personnel. On the other hand, when a new institution is to be constructed in the center of an industrial or residential district it seems wise to plan to house only a skeleton organization within the institution. Orderlies, attendants, janitorial help, ward maids, members of the mechanical personnel and others are to-day being efficiently housed by many hospitals outside their institutional plants. Of course, it cannot be truthfully said that the space occupied by such members of the hospital family is equally useful for housing patients, yet when hospital help is assigned to basement, attic or other insanitary and poorly ventilated floors, damage is certainly done to the institutional morale.

The smallest possible area that should be allotted to any hospital worker cannot be less than fifty-five square feet of floor space. The average medium priced private room usually does not possess less than from eighty to ninety square feet of floor space. If it is not clearly necessary to construct quarters for employees, it would appear more than possible to divert such funds to an increase of patient capacity or of endowment fund.

Another angle to this problem concerns itself with the lessening of the possibilities of theft and of the troublesome moral problems that arise when members of the hospital's personnel live within the institution. It is usually estimated that from \$15 to \$18 a month is required to recompense the hospital worker of the lower grade who lives outside but eats inside the institution. If neither room nor board is furnished the rate of recompense is usually set at from \$25 to \$30 a month higher than when both are supplied.

Unless adequate and proper space for the housing of institutional help becomes more or less an incident in the construction of the new hospital, it would seem wise to devote a large part of the funds available to the development of the physical and scientific equipment of the hospital and to plan, all things else being equal, to house a portion if not all of the personnel outside the institutional plant.



How the Crippled Child Is Helped to Overcome His Handicap

By H. ELDRIDGE HANNAFORD

Samuel Hannaford & Sons, Architects, Cincinnati

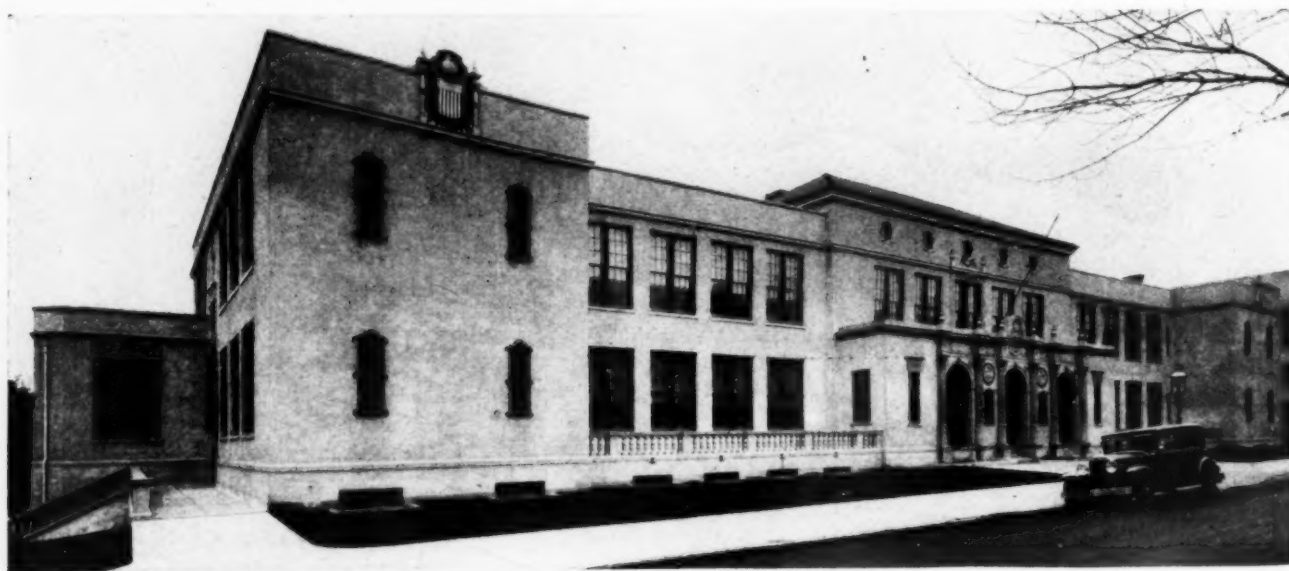
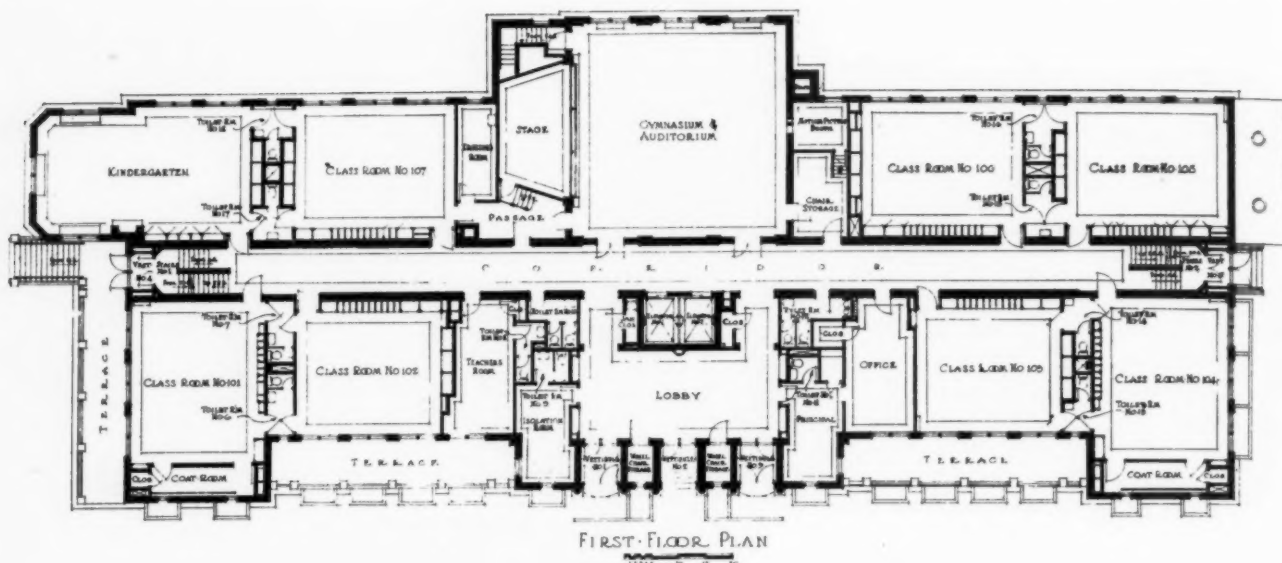
THE School for Crippled Children, Cincinnati, though constructed and administered by the board of education, is nevertheless a unit of the comprehensive medical service that exists in the city, and is therefore closely allied with the Cincinnati General Hospital and the college of medicine of the University of Cincinnati.

At the outset careful consideration was given to what might be termed the basic philosophy of plan. Schools for crippled children in other portions of the country were carefully studied and analyzed, and it seemed as though all of the existing institutions overstressed convenience of arrangement and appointments for the crippled child. In other words, they accepted the child's

infirmity and endeavored to make things as easy as possible for him instead of attempting to approximate ordinary conditions and, by so doing, develop the child's initiative to meet and overcome normal obstacles.

Instead of the more common one-story type of school, it was therefore determined to erect a multistory building with stairs instead of ramps, so that the crippled child would be encouraged to learn to use stairs and to develop himself in spite of his infirmity. Of course the fact was recognized that certain children were practically helpless and elevators were installed and wheel chairs provided to take care of such cases.

With this important decision as a point of departure, the school as developed is more or less



The entire floor plan arrangement and a view of the School for Crippled Children, Cincinnati, are shown here.





To develop the initiative of the crippled child, the classrooms have been arranged to resemble in every way rooms in a school for normal children.

the typical school, with additional features for convenience and treatment.

The typical classroom does not differ in any way from that of a school caring for normal healthy children, except that private toilets have been introduced between each pair of rooms. The main entrance lobby has three vestibules, two of which are on a level with the floors of the busses that convey the children to and from the school. These busses can be backed against the vestibule entrances and the children can enter the school without being exposed to the weather. In connection with these entrance vestibules are large closets for the storage of wheel chairs.

To encourage any child who is at all capable of helping himself, hand rails have been placed on both sides of all corridors. There is also provided as a part of the school a garage large enough to accommodate the busses that transport the children.

Special Treatment Suites Planned

Special suites have been arranged for giving all sorts of physiotherapeutic treatments. As body weight is considerably reduced in water and the difficulty of exercise consequently lessened, there is a small tank room in the basement where the children may indulge in certain corrective exercises while in the water.

The first floor is substantially a typical school floor. The second floor is almost entirely given over to the special treatment suites. These consist of an orthopedist's examining room, on one side of which is a treatment room and on the

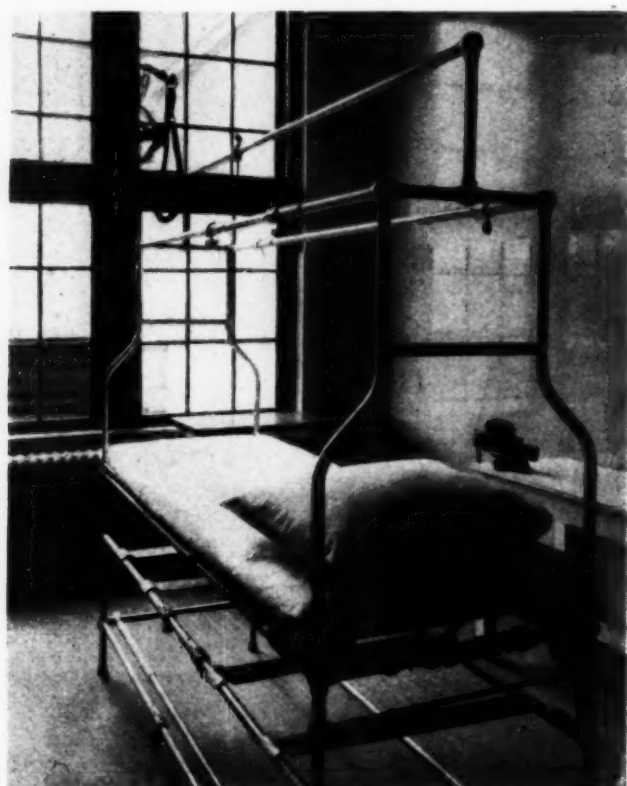
other side a plaster room, where casts may be made or changed or special splints applied. Another suite, similar to the orthopedist's, houses the pediatricians. Here examinations are made and proper treatments carried out in the treatment room adjoining the examining room. These treatments consist primarily of sun lamp exposures, baking, massage and corrective exercises. A certain portion of each child's school day is given over to this routine of treatment.



All children are regularly examined and treated in the dental clinic.

All children are regularly examined and treated in the dental clinic, where in addition to the ordinary filling and cleaning of teeth necessary orthodontic work is done. In connection with the general dental treatment room a small laboratory and dark room have been provided for x-ray work and the making of impressions and corrective appliances.

The building faces north and at the southeast and southwest corners are open air classrooms where the children are required to spend a cer-



In the plaster room, a part of the orthopedist's suite, casts and splints are made and applied.

tain portion of each day, either at play or on cots for a definite rest period. In conjunction with these open air classrooms are large closets containing extra blankets or heavy outdoor clothing for the children to use during the winter months. The rooms have glazed doors so that they can be closed up on occasion and used as ordinary classrooms. The glass in these doors permits the penetration of the ultraviolet portion of sunlight.

In this school great stress has been placed on vocational training, and the children are encouraged in every way to learn some useful occupation intended to make them self-supporting, or partially so, in after life. This vocational training suite occupies the entire north front of the second floor between the two end classrooms. On the boys' side there is a room for general con-

struction work, where furniture making, toy making and similar manual training are taught. In conjunction with this room are auxiliary rooms for the sanding, painting and general finishing of the pupils' work. On the girls' side a well arranged kitchen provides for instruction in the household arts, and there have also been included a large sewing room and fitting room for instruction in dressmaking.

Practically all of the pupils' work is for sale, and many special orders are taken. This requires rooms for the storage of finished work and another room for packing and preparing work that is on order for shipment. In the first floor lobby are special exhibition cases displaying outstanding work by the pupils, and these form a most attractive feature of the main entrance.

During the short time that the school has been in service the results have been highly encouraging, and it would seem that the general premise upon which the plan theory was based is a proper one. All children who have come to this school have been taught to overcome their difficulties as far as possible and in so doing have developed self-reliance which has been of great value not only to their physical well-being but also in raising their morale to a point where they seem much less conscious of their affliction than if the affliction had been accepted and everything made as easy as possible for them.

It is of course obvious that the personnel in charge of such an institution must be of the highest type, and in this the board of education has been particularly fortunate. A large share of the credit for the school's success is directly due to the sympathetic and intelligent handling of the problem of the crippled child by its teaching, nursing and medical personnel.

This school is equipped to take care of approximately 250 children.

How the Staff and the Pharmacist May Help Each Other

That inspection and study of the hospital drug room will be profitable alike to the administrative and the professional members of the hospital staff, is suggested by Dr. Ernest E. Irons, Chicago, in a paper in the *Journal of the American Medical Association*.

Not only will the superintendent find unexpected opportunities for economies, but the physicians will be surprised at the large amounts of proprietary drugs they are using in place of inexpensive drugs that are equally effective. A closer acquaintance and cooperation between the hospital pharmacist and the members of the attending staff will be of mutual profit. Such a relationship will help to correct the habits of staff members to prescribe proprietary medicine and will do much to eliminate confusion.

Planning Service Facilities Within the Hospital*

By FRANK E. CHAPMAN

Director of Administration, University Hospitals, Cleveland

THE preceding article discussed items of construction that are intimately related to the operating problem. The following is a discussion of the planning of service facilities within the hospital. These facilities are discussed under twelve headings.

1. The nursing unit: This unit is discussed first because its size, shape and general character determine, in general, the character of the hospital building. It occupies a large ratio of the total area of the institution, and is the medium of direct service for which the hospital is primarily built. It seems pertinent to suggest that those responsible for the planning of this service list all possible requirements of a nursing unit, and then rule out those facilities that may not be necessary for the individual hospital. A check list is submitted for consideration: patient's room or ward; head nurse's station; medicine cabinet; waiting room; nurses' waiting room and toilet; chart desk; utility room or rooms; diet kitchen; public toilets; supply closet; stretcher closet; tray closet; flower closet; linen closet; maids' hopper room; corridor; dressing room.

Providing for Service Facilities

Proper service to patients is predicated in a large measure upon the adequate allocation of space for service facilities. This may sound bromidic, but it is surprising how frequently it is ignored. In a desire to secure a maximum number of beds in a given area many hospitals forget that the servicing of those beds without adequate utility rooms, diet kitchens, supply closets and all the elements that enter into the service of a patient is an impossibility.

These various facilities will be discussed in the order of their presentation.

For the patient's room or ward, the building code in a particular community should be consulted to learn the area per bed required. This area varies. In most instances the area required by law is a minimum area, and sound hospital planning dictates that it shall be exceeded rather

than decreased. The patient's bed should be placed so that he will not face the light or have the head of his bed towards the light. Patients should have the benefit of seeing the outdoors and the bed should be so arranged that they will not be compelled to stare continuously into an open window. The exterior of the building should be planned so that windows in the rooms of patient occupancy will not be higher than thirty-three inches from the floor. Adequate window area in the space and adequate ventilation should be provided.

Planning the Unit

The head nurse's station should be reasonably close to the center of the nursing unit. It should be planned to render easy the control of personnel and visitors. The head nurse should be at a point where she can easily supervise all those coming onto the unit. This station should be equipped with a telephone, a nurses' call annunciator and, in most instances, with a second desk for the use of the medical house officers.

Of importance at this station is a small sink with a drain board, a medicine cabinet with shelves, either as a separate piece of equipment or as an integral part of the building, an automatic light on the door so that the nurse may not work in the dark and a separate poison cabinet with a special lock.

A visitors' waiting room is a greatly neglected facility in most hospitals. Each nursing unit, no matter how large or how small, should have facilities designed specifically for this purpose, provided with the requisite accessories, such as a telephone, easy chairs and, if at all possible, a small individual room for visitors to acutely ill or dying patients.

A nurses' waiting room and toilet are necessary. The problem of proper facilities for special nurses and for the permanent nursing personnel of the nursing unit requires the allocation of space for their use when they are not actively engaged in their work. This precludes the necessity of their loitering in corridors and congregating in utility rooms. The nurses' waiting

* This is the third of three articles by Mr. Chapman on the development of the hospital building program.

room requires easy chairs, a nurses' call annunciator and toilet facilities. As an adjunct to these facilities some institutions have designed specific stations for the orderly.

Facilities for charting may be developed in conjunction with the nurses' waiting room. There should be a nurses' annunciator, chart racks, a desk or counter for charting and a proper supply of illumination.

A properly located and equipped utility room is practically the backbone of the nursing service insofar as physical set-up is concerned. Unless serious thought is given to the planning of these services the hospital cannot give good bedside care. The planners, therefore, should be liberal in planning and equipping the utility rooms. An adequate floor area should be assigned these rooms and those items of equipment that will be conducive to proper service should be installed.

The ward diet pantry or serving kitchen cannot be planned until the general scheme of food service for the institution is determined. With that scheme as a basis for planning, consideration of the serving pantry on the ward in conjunction with the serving kitchen, the diet kitchen and the central preparation kitchen is the only sound way of approaching this problem. Again there is the necessity for liberal planning.

Building codes provide in many instances a ratio of public toilets to potential occupancy, and therefore each community has an atypical problem.

Corridors Should Be Wide

The need for the following facilities on each nursing unit is presented: supply closet; stretcher closet; tray closet; flower closet; linen closet. No detailed discussion of these facilities is needed. If the institution is rendering an orderly service it must stimulate orderly habits in the minds of its personnel, and this cannot be done without "a place for everything and everything in its place." There is no intention to suggest that supply closets should be adequate for storage purposes, but only for current supplies on the unit.

The maids' hopper room is designed for the care of housekeeping supplies and equipment, and the need for its installation is self-evident.

There are many who contend that narrow corridors answer the hospital's need and that the development of a wide area for this purpose is wasteful. On the other hand, corridors of eight or eight and a half feet will do more to ensure a restful, quiet atmosphere in the hospital than any other one medium of planning. Unless the financial problem of the hospital is acute, corridors should be at least eight feet wide.

The installation of dressing rooms on nursing units has not the universal appeal that it formerly had. As a matter of fact, there are few present day institutions that are installing dressing rooms. If dressing rooms are to be installed, then the sterilizing facilities that normally would be placed in the utility rooms should be installed in the dressing room.

Operating Suite Needs Special Attention

2. The operating suite: The large ratio of surgical patients in many of our hospitals and the dominating influence of the surgeon that naturally follows often result in an overdeveloped operating suite as compared with other facilities. No thought of a meager operating suite is entertained. A plea is registered for a serious consideration of the needs of the surgeon and the allotment of adequate facilities for his service, but not at the sacrifice of other phases of institutional activity.

The same general approach followed in planning the nursing unit is suggested here. A listing should be made of all possible facilities in the suite, and those facilities that are not necessary eliminated. That listing is given as follows: operating rooms; sterilizing room; anesthetizing room; scrub-up room; instrument room; nurses' workroom; nurses' toilet; doctors' dressing room and toilet; office; maids' hopper; visitors' waiting room; supply and storage closet; corridor; laboratory; gauze room.

A poorly planned large operating room is a poor substitute for the properly planned small room. The tendency is to overdevelop the size of the operating rooms. Such overdevelopment is wasteful in construction and certainly not economical in operation, both as to housekeeping and as to the expenditure of energy on the part of the operating suite personnel.

The type of floor, cove, wainscot, wall and ceiling to be installed should first be determined. A liberal use of tile in these facilities will have a definite value. Present day trends are toward the installation of neutral colors of green or cream rather than white. Color analysts have proved conclusively that softer colors have a salutary effect upon eyestrain.

Previously it was deemed prerequisite that operating rooms have north skylights to illuminate them properly. To-day this is practically a discarded theory. There is a correlated problem of an efficient system of general illumination. Emergency illumination must not be overlooked.

An adequate supply of base plugs and in some instances floor plugs is desirable.

A clock should be provided in each operating room connected with the synchronized time system of the institution.

Air and vacuum connections from a central plant are highly desirable.

In general there are two thoughts with reference to the operating room—one is the installation of supply closets and cabinets built in as a part of the room, and the other is the maintenance of as plain a room as possible. Habits of the individual community will dictate the plan to be followed in each hospital.

Sterilizing room facilities must be located to serve individual operating rooms with a minimum of travel. General practice seems to dictate the placing of a sterilizing room to serve two operating rooms. Again a liberal use of tile is an operating economy. It is suggested as desirable that all basic equipment, such as sterilizers, shall be installed in duplicate to ensure the continuous operation of a vital service.

With the use of pedestal operating tables and the changed methods of anesthesia, the necessity for the anesthetizing room is decreasing. Again local habits must dictate, and again the practice of the local surgeon must be considered.

If an anesthetizing room is installed, it should be reasonably close to the operating room to be served. It should be as free from any suggestions of austerity as possible. The patient should be introduced into it without the necessity of going into the operating room suite corridor and the only suggestion of the atmosphere of an operating room should be the lavatory in the room. Of course, if gas anesthesia is piped from a central station this equipment will also be an integral part of the room.

Care should be used in the proper location of scrub-up rooms, to make it easy for the surgeon to enter the operating room surgically clean. Planning trends are to install one scrub-up room to serve two operating rooms.

Much Depends on Nurses' Workroom

Before the instrument room can be planned, it is necessary to determine whether the hospital has an operating policy of supplying all instruments, or whether it is providing storage facilities for the instruments of the individual surgeons. The purpose of the instrument room is to provide storage facilities for instruments as far removed as possible from the unfavorable conditions of storage that are produced in operating rooms, sterilizing rooms and workrooms where the moisture is excessive. Properly designed and adequate instrument cabinets should be installed, dependent entirely upon the plan of

operation of the individual hospital. Also, there should be space for at least a small worktable in this room.

The efficiency of the operating room service depends, in a large measure, on the plan of the nurses' workroom. Without facilities of this sort, no operating room team can properly function. The nurses' workroom should be immediately adjacent to the supply closet and it should be equipped with adequate cupboard space, worktables and similar equipment.

In this connection, general practice dictates the location in this space of dressing sterilizers for the hospital. Later trends are towards the removal of these facilities from the operating suite to another point. If it is determined to locate the dressing sterilizer facilities in the nurses' workroom, adequate ventilation should be assured.

Other Important Facilities

The need for dressing room and toilet facilities is self-evident.

If the hospital is of any size, there should be a doctors' dressing room and toilet for the attending staff, and one for the house staff. They should be equipped with lockers for surgeons' clothes, rest room facilities and telephones, and they should be immediately adjacent to the doctors' toilet, which should also be equipped with showers.

In an operating suite of any size, the need for an office, or at least for desk space for the proper recording of the transactions of the suite, is apparent. This may be adjacent to the nurses' workroom and should be equipped with a telephone.

Maids' hopper facilities are absolutely indicated as an integral part of the operating suite, to the end that there may be no necessity for traffic outside the suite for the rendering of housekeeping service.

To keep visitors from congregating in the corridor outside the operating suite, and to provide facilities that are essential, a small visitors' waiting room detached from the operating suite itself but adjacent to it is desirable.

The need for a relatively large area for a supply and storage closet is indicated.

Because of the congestion of traffic the operating suite corridor must be liberally planned.

With the accepted practice of immediate diagnosis of pathological specimens, it is necessary to plan facilities for frozen sections and quick laboratory procedures within the suite.

If the hospital is using high pressure gas anesthesia, as is becoming more and more universal,

it is suggested that consideration be given to the development of a central gas station in the operating suite, and to the piping of gas to the individual operating rooms. This does away with the handling of heavy tanks in each operating room. If such a scheme is developed the tank room must be close to the operating rooms.

Guarding Against Explosion Hazards

In the development of an operating suite, provision should be made to protect it against the generation of static electricity in conjunction with the use of pressure gases for anesthesia. Studies made in a leading university have prompted the following general recommendations: that the temperature of an operating room shall never exceed 74 degrees; that the air supply be controlled with a humidity of 65 per cent or higher; that each electric switch be placed outside the room rather than inside. The recommendation further carries the thought that the floors shall be laid in cloisonné pattern of either tile or terrazzo, separated by narrow brass strips six inches apart, preferably less. Each piece of movable equipment shall be equipped with link brass chains, which are long enough to drag on the floor at least three inches, so that the chains may contact with at least one of the brass strips regardless of the position of the equipment.

3. Dietary: It is necessary to determine the operating policy of food service before an intelligent plan of the dietary unit can be made. Is there to be centralized food service with the patients' trays made up in their entirety in the main kitchen? Is the food to be served in bulk and sent to the individual diet pantry or is there to be a modification of the two plans? Is the hospital to serve approximately the same diet to all types of patients or is there to be a selective menu with the consequent problem of à la carte preparation for certain of the beds? These things must be determined in order to plan facilities properly to meet the service demands.

Again it is suggested that a list be made of all the possible needs of the dietary unit, and by a process of elimination those elements excluded that are not necessary to meet the needs of the individual institution. The list suggested is as follows: Main kitchen; bake shop; vegetable preparation room; special diet kitchen; butcher shop; milk formula room; serving kitchen; refrigeration room; ice cream room; dishwashing room; maids' hopper room.

In the main kitchen the type of fuel to be used must be determined, and, in this connection, it is deemed proper to suggest a serious consideration of the use of electricity in cooking. With the im-

provement that has come about in electric elements, given a reasonable rate, economies can be effected by the use of electricity and certainly the operation of the kitchen will be more comfortable, cleaner and all in all more desirable.

The kitchen should be planned not by a hotel man but by an individual who understands operating hospital needs. Certain limited facilities for special food preparation, of course, are indicated but all in all hospital demands are for volume cooking and the equipment should be planned accordingly. Of importance to the happiness of the dietary personnel is a large, airy, well ventilated kitchen, not cut up into small spaces, but separated as to its various facilities by low partitions that facilitate maintenance, housekeeping and supervision. Specifically, there are but few facilities in the dietary unit, such as the dishwashing room, preparation room and the refrigeration room, that need to be in a fully partitioned room. The rest of the facilities, if the space permits, can be so planned as to be in one large area separated by imaginary lines or by low partitions.

If the individual hospital decides to bake its own bread, it will have to install such items as flour handling equipment, mixers and similar items. Experience would indicate, however, that it is the exceptional hospital that will need these facilities. With present day methods, in all probability better bread at a lesser price can be purchased. There is, however, the necessity for baking equipment to provide pastries and desserts.

The vegetable preparation room is generally an untidy room and should be separated from the main suite by a full partition. It should be equipped with machinery for vegetable preparation, and it should have worktables and adequate plumbing.

Essentials of a Well Planned Dietary

Experience indicates that in an institution running a fairly large ratio of formula diets, the special diet service should be placed in a separate room rather than in the main kitchen. If this scheme of planning is accepted, the special diet kitchen must have practically a duplication of the equipment in the main kitchen.

A butcher shop is needed in large institutions. There is little need for it in an institution of less than 300 beds.

In an institution of any size that serves pediatric patients, a milk formula room will be found not only desirable but essential. In this room there should be sterilizers and pasteurizers, refrigerators, worktables and adequate plumbing.

No detailed discussion of the equipment in the serving kitchen is possible, without an understand-

ing of the operating plan of the hospital. With centralized service, this room must be thoroughly equipped. With decentralized service, there is a decrease in area.

In the refrigeration room it is highly desirable that there be a minimum of three large refrigerators, one for meat products, one for milk and milk products and one for vegetables. The scheme of operation of the individual institution will dictate whether these facilities are to be located in conjunction with the storeroom or as an integral part of the dietary suite.

Since the making of ice cream is rather an untidy procedure, if it is at all possible it should be carried on in a separate room, or else in a room removed from the main kitchen activity.

The operating plan must dictate the development of dishwashing facilities. If there is to be centralized dishwashing, one type of equipment is indicated; if it is to be decentralized, another type is necessary.

Maids' hopper rooms must also be considered as an integral part of the dietary unit.

Developing the Laboratory

4. The laboratory unit: The hospital must accept as a fundamental obligation the furnishing of adequate laboratory facilities to meet the demands of the clinicians, and to stimulate a higher type of scientific understanding of the problems of disease. At the same time it would be folly on the part of the hospital to develop a laboratory beyond the needs of its physicians. This would be economically unsound and productive of waste.

The laboratory is more and more accepted as a requisite to proper hospital service, requiring the allocation of increasing areas to laboratory practice. A careful evaluation of the clinician's needs for laboratories must be made and the planning of facilities developed to meet these needs as a part of the general scheme.

Whether the laboratory should be planned in one large room or in a series of smaller rooms is dependent largely upon the size of the institution, the demands of its physicians and the habits of practice within the community.

The autopsy room and mortuary is a part of the laboratory development. This should never be overlooked in the general scheme of planning.

5. The x-ray suite: Is the hospital to be planned to serve only patients within the institution or is the x-ray department to care for a volume of referred work from the outside? This question must be answered one way or another preliminary to the development of the suite, and the approximate demand for service must be the basis of measuring the space allotted for this purpose.

6. Special therapy: Hospitals are more and more being asked to supply equipment for mechanotherapy, electrotherapy, hydrotherapy and physiotherapy. The needs of each hospital should be measured in the light of the demands of its attending staff, and facilities provided to meet that need. This is a general statement, but it cannot be presented more specifically without an analysis of individual needs. The matter is included in this article merely as suggestive of the demand of service.

7. Housekeeping facilities: There is the need for a central control station for the matron, and of facilities for the central distribution of supplies. This central position for the housekeeper should be placed to make possible the easy control of personnel. Of course, the necessity for decentralized facilities for housekeeping supplies, such as hopper sinks, broom closets and items of a comparable type is self-evident.

8. Storage facilities: Unfortunately this is an activity of the institution that has been woefully neglected. Economy of operation is absolutely impossible without a properly planned storage unit that will make possible accuracy in the receipt of goods, in storage and in the control of issuance. As a corollary to this is efficiency in buying, which cannot be brought about without a readily available knowledge of existing supplies, which in turn is based upon ease of inspection of storage facilities. It is emphasized, therefore, that a properly planned, well ventilated storeroom immediately adjacent to the service entrance, equipped with scales, racks and storage facilities is prerequisite to efficiency and will justify its existence many times over.

Heating Plant, Laundry, Offices

9. Mechanical facilities: The heating plant cannot be discussed in detail without a knowledge of each individual institution, but adequate facilities for maintenance work, such as machine, electrical, carpenter and paint shops, should be provided. The degree of these developments is, of course, predicated entirely upon the size of the institution, but the need for all of these facilities is present in every hospital. Facilities for the repair of many items will produce operating economies.

10. The laundry and the sewing room: The laundry problem of an institution requires an overdevelopment of washing facilities, in order that greater time may be taken in washing processes with a formula not built up to a point where it is harmful to textiles. The institutional laundry problem is different from that of the commercial laundry. The commercial laundry builds up its

washing formulas to expedite the work. The institutional laundry's primary thought must be the conservation of textiles and therefore the need for a larger development of washing facilities. The laundry should be planned so that there will be no crossing of soiled and clean linen. In addition to washing and finishing facilities in the laundry a central linen room is desirable.

In a great many institutions experience dictates the location of the sewing room as an integral part of the laundry activity to meet the problem of repair and also the problem of the manufacture of those items of clothing that can be made in the hospital.

11. Administrative facilities: Under this heading are grouped all offices, the admitting room, emergency suites, personnel rest rooms, lobbies and reception rooms and record vaults.

Original impressions are usually lasting ones. This is especially true of patients since they are abnormally sensitive. The man, woman or child presenting himself or herself at the hospital for care is fearful and therefore subject to reactions that are not experienced by the normal individual. For this reason, it is necessary to have the primary contact as cheerful as possible. Too much thought cannot be given to the proper location and the equipment of the reception lobby.

In the lobby or immediately adjacent to it is the information center. In many hospitals the information center is in the lobby itself, so that the patient may contact on a more personal and intimate basis than is possible over a counter.

Office Space Should Be Adequate

Private offices in the main are wasteful but there are certain members of the personnel who require privacy for their contacts with patients, with visitors and with the public, and also there are certain activities that require private offices for their efficient performance.

The hospital requires in its administrative set-up all of those things necessary in any general industrial office set-up, and it is well to understand that adequate space is not only desirable but requisite to efficient management.

A combination of the admitting and emergency suites seems logical, except in larger institutions. Whether this will be one room or a series of rooms is dependent entirely upon the size of the institution and upon the type of its service.

Special nurses' locker rooms, a doctors' lounge and cloak room and rest rooms for women workers, are all highly desirable and are almost essential.

12. Housing the personnel: Again generalities are unsatisfactory. Is the hospital to house all its personnel or only a limited number? Each side

of the question has its champions. The question must be answered and a general operating scheme established before housing facilities can be planned. If the housing of personnel is restricted to the nursing group, one type of facility should be developed. If other groups are to be housed, then separate entrances, separate recreational facilities and, in many instances, separate buildings must be developed.

If the hospital assumes responsibility for the housing of its personnel, it immediately must fulfill the obligation by providing a homelike, cheerful environment. Efficiency in our everyday work is predicated in a large measure upon happiness, and happiness cannot prevail unless the recreational hours are spent in a suitable environment.

In the nurses' home, there is, of course, the necessity for considering the educational in addition to the domestic and recreational services.

How Shall Equipment Be Chosen?

Equipment: The development of an equipment list for a hospital is as tedious and exacting as the development of construction plans and specifications. The compilation of equipment lists and specifications must not be delayed, but must be handled as a related part of the general building development. It should be emphasized that an intimate interrelationship must exist between the planning and the equipping of the hospital. It seems logical that the same individual should supervise both developments, so that there may be an understanding of the relation of the two problems. A cursory analysis will demonstrate the correctness of this statement. In planning an individual space, the intelligent planner will visualize not only the building of that space, but its equipment and the services to be rendered therein.

The purchasing of especially designed equipment is to be discouraged as are also special items of construction. The hospital field is so large today and the market so thoroughly covered that there is no need for specially designed equipment. Such equipment not only is expensive as to first costs, but it will necessitate replacement costs out of proportion to the need.

In developing an equipment list, the planner should not attempt to visualize the entire institution. This is an impossibility and will result in undue hardship in the development of a complete list. Nor will it offer the assurance of accuracy and completeness that is to be desired. Likewise, there should be no attempt to establish the requirement of any one commodity for the institution as a whole. In other words, there should be no attempt to determine the number of beds of a given type in the beginning. Rather the equip-

ment problem should be approached by dividing the institution into given areas. The use of the architect's floor plans and plan number is suggested. If Area No. 1 is an entrance lobby, the completed space, its equipment and the service that it is to render should be visualized and the necessary equipment listed on an individual card. This should be done for each area in the hospital.

After a card has been filled in for each area, it is proper to compile a list of each commodity. In making this compilation, it is wise to differentiate, for buying purposes, between the various types of the commodity to be purchased: beds, private; beds, semiprivate; beds, ward; instrument tables, large; instrument tables, small; instrument tables, Mayo. These are merely given as illustrations.

When this commodity list has been compiled, it is suggested that a commodity card be made for each type of equipment, listing the area spaces to which each item of equipment is to be assigned. This procedure is suggested as an aid to the receiving and placing of the equipment.

The early months of operation will demonstrate the need for many items that have been omitted, no matter how efficient a list is compiled. The personal element enters to such an extent that it is believed wise to plan the purchase of absolute essentials only, and to establish a reserve fund for the purpose of purchasing such equipment as will be found necessary later. In purchasing equipment, first costs are not last costs, and improper economies in the purchase of poor merchandise is never beneficial. Equipment should be bought from reputable houses.

Furnishings Should Be Colorful

The esthetic properties of the furnishings must not be overlooked. Color may be introduced into even the professional equipment, if it is desired, and certainly it should be characteristic of house-keeping equipment. Rugs and draperies should harmonize in color. Ornamental lights should be installed. In the aggregate the extra expense involved is not great and certainly it is justified.

As a part of the equipment problem, there is, of course, the problem of consumable supplies. It is unwise to purchase large stocks of supplies in the beginning. It is recognized that this is a fairly universal practice on the theory that funds are available at this time that will not be later on. The psychology of such a procedure is unsound. First of all, hospital supplies go out of date as fast as women's styles. What is still more important is that if the hospital starts out with a large store-room inventory, the energy needed to reduce that inventory to a normal basis in later years is stupendous. One of the major operating problems

is that of keeping a well balanced inventory. With our present day system of distribution there is no particular reason for buying large stocks of any one commodity. If they are bought the probabilities are that they will be improperly used.

Now the day of days has arrived! The hospital is ready for dedication. The years of dreaming, the hours and days and months of labor, the expenditure of time and money have borne fruit, and the completed temple of service is to be presented to the community. The labor has been great, but the joy of accomplishment is even greater. The task, however, is not done. If it has been properly and wisely planned, with a sound policy of operation the hospital should be a joy forever.

The Completed Institution

If the completed institution is a new institution, the problem is a relatively simple one. There are no traditions and no pernicious habits to overcome. The organization should be developed with all of the counsel it is possible to secure. Personalities should be forgotten. Those in charge must keep uppermost in mind the fact that the institution, if it is to be successful, must be community-wide in its scope, larger than any person or persons, developed for the good of the community as a whole, and not for the benefit of any one person or of any one group of persons.

There is nothing mysterious about the operation of a hospital. The hospital is a medical workshop designed to provide facilities for the care of the sick. Its operation is subject to the application of identically the same principles demonstrated as successful in other walks of life, subject, of course, to modifications inherent to the nature of the work. Properly devised charts of organization, the delegation of responsibility and authority through the proper channels, are applicable in identically the same degree as in industry. The success of the institution will in a large measure be dependent upon the soundness of this application.

If the institution has been established, now is a strategic time to institute new procedures. Pernicious habits that have crept into the organization should be swept away in a general house-cleaning.

Few are chosen to carry the responsibility of planning, building and operating a community hospital. The burden is heavy, but the compensation is great—a compensation in the realization of a type of service to mankind that can be rendered by only the chosen few. It is to the lightening of the burden, and to the development of a clearer understanding of the problem that this article is dedicated.

How Hospitals Fared at the Hands of Lawmakers Last Year*

HOSPITALS were not neglected by Congress or the states in laws that were either considered or passed at regular or special sessions last year. These laws are discussed here under five headings: (1) bills affecting hospitals generally; (2) bills relating to county hospitals; (3) bills relating to municipal hospitals; (4) bills relating to state hospitals; (5) Federal legislation.

A study of the legislative proceedings in the various states, as they relate to hospitals generally, reveals the following facts:

Massachusetts¹ and Rhode Island² considered bills which, if enacted, would have required the annual licensing of every hospital, clinic, dispensary, convalescent home and nursing home in the state. Both bills failed to become laws. Bills were defeated in Colorado³ and Pennsylvania⁴ which proposed to require all private nursing homes or private hospitals of whatever nature to be licensed by an appropriate state agency. A bill was killed in Arizona⁵ which sought to authorize the board of supervisors of each county to enforce regulations for the establishment and operation of tuberculosis hospitals and sanatoriums within their respective counties. A defeated Maine⁶ bill proposed to require that private hospitals and private houses for the treatment of nervous and mental patients be licensed by the governor and be subject to regulation by the governor and the state board of health. Pennsylvania⁷ enacted a law providing for the licensing and regulation of maternity hospitals. A similar bill was killed in New York.⁸ A Utah⁹ bill, which was killed, aimed to create a state board of institutions and to delegate to this board all the liabilities and powers previously exercised by the state board of health in regard to maternity hospitals and infant homes.

On the subject of miscellaneous rights and duties, many bills were considered and a few passed.

Equal Rights for Practitioners of All Kinds: The legislatures of six states¹⁰ considered legislation which, if enacted, would have required all hospitals supported in whole or in part by public

contribution or exempted from taxation to accord equal privileges to all licensed practitioners of the healing art, regardless of the method of healing those practitioners profess and practice. None of the states, however, acted favorably on the proposed legislation. An Arkansas¹¹ bill, providing that osteopathic physicians be accorded the same privileges as regular physicians in hospitals supported by public funds, was killed.

Ensuring Payment of Compensation Due: North Carolina¹² and North Dakota¹³ had before their legislatures bills which sought to make it a misdemeanor for any one to obtain care at a hospital or sanatorium without paying for the attention. The bills were killed in both states. Bills were introduced in five states¹⁴ which, if enacted, would have allowed hospitals a lien on any judgment, settlement or compromise obtained in a personal injury claim or suit by the patient. All the bills, however, excluded from such liens any recovery had under the workmen's compensation laws. None of the bills were enacted.

Hospital Records in Court: New York enacted a law¹⁵ which requires an order on a hospital to produce its record in court to be served on the hospital at least twenty-four hours before the time fixed for the production of the records in court.

Equipment and Furnishings: In Iowa¹⁶ a bill requiring every hospital to have at least one room equipped with permanent bars or heavy screens over the window for the confinement of patients was defeated.

Nurses and Undergraduate Nurses: The legislature of South Carolina¹⁷ considered unfavorably a bill which proposed to make it unlawful for any hospital to put an undergraduate nurse on special duty with a patient, while the nurse is a student of a nurses' training school.

First Aid or Emergency Treatment: In Massachusetts¹⁸ a bill proposed to require hospitals to render emergency medical treatment or first aid in cases of serious accident or injury. According to the provisions of the bill, any hospital refusing to render first aid treatment would be liable to a fine of not less than \$15 nor more than \$200 for each offense. This bill did not become a law. A similar California¹⁹ bill, which sought to require hospitals to render first aid treatment to persons who had been injured in ac-

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cidents occurring on public highways was killed.

Corporation Reports, Required by State Incorporation Law: A bill was killed in New York²⁰ which proposed to provide that all corporations in New York, except charitable and educational organizations, file a list of their officers and directors within twenty days after their appointment with the clerk of the home county of the corporation and with the secretary of state.

Utility Service: Indiana enacted a law²¹ which authorizes public utilities or any city or town operating a utility to furnish utility service free of charge to hospitals accepting charity patients.

Care of Indigent United States Veterans in State Hospitals: In Pennsylvania²² a bill proposing to require that any ex-service man or woman having a legal residence in the state and without financial resources be admitted to any hospital receiving financial aid from the state, the expenses for such care and treatment to be paid by the state, was vetoed by the governor.

Distribution of Seized Liquors to Hospitals: A Connecticut²³ bill, providing that wherever liquors have been seized because of their distribution in contravention of the state prohibition law, the liquor, if fit for medicinal use, may be given to hospitals, became a law.

Ambulances: A law was enacted in New York²⁴ which provides that no registration fee shall be paid for a motor vehicle equipped to carry sick or injured persons. A bill was killed in Maryland²⁵ which sought to give the right of way to police and fire department ambulances.

Equal Charges: Two West Virginia²⁶ bills sought to provide that a hospital, owned and operated by any railroad company or public utility for the treatment of the employees of such corporations and supported by means of deductions from the wages of the employees, shall receive no one for treatment at a less rate or charge than is made for the employees or their families for like services. These bills expressly provided, however, that the provisions of the bills should not prevent charity work. Both bills were killed.

Fingerprint Identification of New-Born Baby: An unsuccessful attempt was made in Tennessee²⁷ to require hospitals and maternity homes to establish and maintain a system for the identification of all infants born therein.

The states did not overlook legislation relating to county hospitals.

Bills seeking to authorize the establishment of county hospitals, of one kind or another, were pending in eleven states.²⁸ In six of these states²⁹ the bills proposed to authorize the establishment of county general hospitals. In two states³⁰ the

bills proposed to establish institutions for the feeble-minded, and in two other states³¹ bills proposed to provide for the establishment of county tuberculosis sanatoriums. In one state³² a bill was enacted authorizing counties to maintain hospitals for the treatment of women afflicted with nervous diseases. Of the six states³⁰ considering legislation to establish county general hospitals, four states³³ acted favorably. The law as it was enacted in Indiana provides that whenever a petition signed by not fewer than 30 per cent of the residents of a county is presented to the board of commissioners of such county, and the board finds that such county is not provided with sufficient hospital facilities to care properly for the citizens, the board shall provide for the establishment of such a hospital. The Nevada³⁸ law provides for the establishment of a public hospital in any county in which the board of county commissioners shall be presented by a petition signed by at least 10 per cent of the tax payers and such petition shall be acted on favorably by the qualified electors of the county at the next general election. This law provides also that a hospital tax of not to exceed two mills on the dollar of the assessed valuation of the property of the county may be levied. The Wyoming²⁸ law authorizes the county commissioners of any county in the state to sell and dispose of county property and to use the funds derived therefrom for the erection of a county hospital.

The South Dakota²⁸ law is similar. In California²⁸ and Illinois²⁸ bills proposing to authorize the establishment of county tuberculosis sanatoriums became laws, the Illinois law providing for the establishment of such sanatoriums and for the levying of a tax not to exceed 1½ mills on the dollar annually on all taxable property of the county, while the California law provides for the establishment and maintenance of convalescent departments or colonies and preventoriums. In Missouri³⁴ and Pennsylvania,³⁴ attempts to authorize counties to establish institutions for the feeble-minded were defeated, the Missouri bill, however, seeking to apply only to a county with a population of not less than 200,000 and not more than 750,000.

In Michigan³⁵ and Washington³⁵ legislation was considered which proposed to authorize counties to unite in operating joint county infirmaries for the care of poor and indigent tuberculosis residents of those counties. The Michigan bill became a law. The Washington bill, after passing both houses, was vetoed by the governor.

Officials: A bill in Washington,³⁶ which was favorably considered by both houses but vetoed by the governor, proposed to provide that the

administration and management of county hospitals, and of joint county and city hospitals, be vested in a board of trustees of five, appointed by the board of county commissioners. In Oklahoma³⁷ a law was enacted which authorizes the state commissioner of health to appoint a superintendent for each county tuberculosis sanatorium, said superintendent to be a qualified physician. Superintendents of each sanatorium shall appoint such assistant superintendents and nurses as shall be necessary and authorized by law.

Residence Requirements for Admission: A bill was killed in Minnesota³⁸ which was designated to amend the law relating to county tuberculosis sanatoriums, by providing that any resident of a county or counties maintaining a tuberculosis sanatorium who is afflicted with tuberculosis and who has been a resident of the state for more than one year immediately preceding the application for admission, is eligible for treatment.

County Appropriations to Private Hospitals: Two bills were enacted in New Jersey³⁹ which authorized counties under certain circumstances to appropriate monies to private hospitals. One of the laws⁴⁰ authorizes counties not having a county hospital to appropriate \$50,000 annually to any one hospital located in such counties and which maintains a building or pavilion for the care and treatment of contagious and infectious diseases. The other law⁴¹ authorizes counties having a population in excess of 50,000 to appropriate monies not to exceed one-tenth of 1 per cent of the total assessed valuation of real and personal property of the county for charitable hospitals located in the county, the facilities of which hospitals are used by indigent residents of the county.

New York⁴² enacted a law which permits contracts for maintaining in a county hospital tuberculosis patients from another county. In New Jersey⁴³ a bill was enacted which makes it lawful for county hospitals to contract with municipal hospitals, and vice versa for services such as heat, laundry and food.

Municipal Hospital Legislation

Bills relating to municipal hospitals included the following:

California,⁴⁴ Michigan,⁴⁴ Pennsylvania⁴⁴ and Wisconsin⁴⁴ considered legislation which proposed to authorize cities to establish municipal hospitals. The California, Pennsylvania and Wisconsin bills became laws. The California⁴⁴ law authorizes every city, county, city and county, or group of counties, to establish a tuberculosis preventorium for the treatment of persons who are susceptible to tuberculosis, and every city which

authorizes and establishes a tuberculosis preventorium shall receive from the state the sum of \$7 a week for each person cared for therein at public expense, provided the patient is unable to pay for his support and has been a bona fide resident of the county for at least one year. The Pennsylvania⁴⁴ law authorizes municipalities other than townships to acquire land by gift, devise or bequest for the establishment of municipal hospitals. The Wisconsin⁴⁴ law authorizes cities to maintain and operate hospitals and to acquire by purchase or lease property both real and personal for that purpose. A New Jersey⁴⁵ bill proposed to permit municipalities having no municipal hospitals, to appropriate a limited sum of money for the maintenance of charitable hospitals in the same or adjoining counties.

Bills Relating to State Institutions

State hospitals were made the subject of legislative discussion and action in several states.

A bill was killed in Arkansas⁴⁶ which sought to create the Arkansas Construction Commission for the purpose of constructing and equipping adequate buildings for the hospital for nervous diseases and the tuberculosis sanatorium. The legislature of Utah⁴⁷ unfavorably considered a bill which proposed to provide that the government and control of the Utah State Hospital be vested in a board to consist of the state treasurer, the state auditor and one female citizen of the state, to be appointed by the governor. Two bills were enacted in Wisconsin⁴⁸ according certain privileges in the Wisconsin General Hospital to World War veterans. One of these laws⁴⁹ provides that in admitting patients to the Wisconsin General Hospital preference shall be given to honorably discharged World War veterans. The other law⁵⁰ allows World War veterans to enter the Wisconsin General Hospital and obtain all care, including professional services, at the clinic cost rate. A law was enacted in Michigan⁵¹ which creates a Tuberculosis Sanatorium Commission to have supervision and control of all state tuberculosis sanatoriums.

Mental Disorders: There were bills pending in six states⁵² which proposed to provide for the establishment of state hospitals for the insane. In California two laws were enacted in this field, one⁵³ providing for the establishment of a state hospital for the insane in southern California, and the other⁵⁴ establishing a colony for feeble-minded persons. A Connecticut⁵⁵ bill was enacted which provided for the establishment of a new state hospital for the insane to be known as the Fairfield State Hospital. Another Connecticut⁵⁶ bill, which was killed, sought to pro-

vide for the erection of an infirmary for the reception and treatment of persons suffering from senile dementia and those suffering from incurable and chronic conditions. A joint resolution was considered unfavorably by the legislature of Idaho.⁵² The resolution proposed that there be submitted to the next general election the question whether or not the constitution of Idaho be so amended as to authorize the legislature to provide for the establishment of asylums for the feeble-minded and insane. An unsuccessful attempt was made in Ohio⁵³ to provide for the construction of an institution for the feeble-minded to be known as the Apple Creek Institution. In Utah⁵⁴ a law was enacted which provides for the establishment of the Utah State Training School for the care, protection and treatment of feeble-minded persons and which further provides that the building is to be constructed by prisoners from the state prison. A Washington⁵⁵ bill, which was killed, proposed to establish an institution in the western part of the state for persons of defective mentality, the institution to be known as the Western Washington Industrial School.

Attempts were made in Minnesota,⁵⁷ Montana⁵⁷ and Tennessee⁵⁷ to provide for the establishment of hospitals for the criminal and dangerous insane. The Montana bill alone was enacted and provides for the construction of additional facilities to serve such a purpose in connection with the Montana State Hospital for the Insane. Attempts were made in Delaware⁵⁸ and Texas⁵⁸ to provide for psychiatric clinics in the state hospital for the insane. The Delaware bills alone became law. Unsuccessful attempts were made in Indiana⁵⁹ and Minnesota⁵⁹ to authorize the board of regents of the state university to erect and maintain in connection with the medical department of the university a suitable psychopathic hospital.

Tuberculosis: Attempts were made in five states⁶⁰ to provide for the construction of additional state tuberculosis sanatoriums. The Indiana⁶⁰ and Missouri⁶⁰ bills were favorably considered by the state legislatures, but were vetoed by the respective governors. The Indiana⁶⁰ bill proposed to appropriate \$500,000 to build a tuberculosis sanatorium in southern Indiana, while the Missouri⁶⁰ bill proposed to construct a hospital adjacent to the Missouri penitentiary for the segregation and treatment of tuberculous convicts. The Kansas⁶⁰ bill proposed to establish a branch of the Kansas State Sanatorium for a tuberculosis station in Carrothy County. The Montana⁶⁰ bill sought to enlarge the facilities at present available in the Montana State Hospital for the Insane, while the Tennessee⁶⁰ bill pro-

posed to divide the state into districts and to have a state tuberculosis hospital in each district. In North Dakota⁶¹ a law was enacted which amends the prior law relative to the North Dakota Tuberculosis Sanatorium by making its facilities available for the prevention as well as the treatment of tuberculosis.

Cancer and Pellagra: A law was enacted in Texas⁶² which established a hospital for the treatment of persons suffering from cancer and pellagra. This bill passed both houses and was vetoed by the governor, but was repassed by the houses.

Orthopedic: The legislatures of West Virginia⁶³ and Wisconsin⁶³ considered bills which proposed to provide for the establishment of state orthopedic hospitals. The Wisconsin bill, which locates this hospital at the University of Wisconsin, alone became a law. A law was enacted in New York⁶⁴ which amends the State Charity Law by dividing the cost equally between the state and the county for the care and treatment of children admitted to the New York State Orthopedic Hospital.

Narcotic Addition: A California⁶⁵ bill amending the California Narcotic Rehabilitation Act was enacted. This law provides that any addict who is charged with a felony at the time of his commitment to the State Narcotic Hospital, after the period of commitment, or on being discharged on parole, shall be returned to the court to answer for the felony of which he was charged at the time of his commitment to the State Narcotic Hospital.

Epilepsy and Tuberculosis Among Negroes: A bill was killed in Texas⁶⁶ which proposed to establish a state tuberculosis and epilepsy sanatorium for Negroes.

In Kansas⁶⁷ a law was enacted which directs the state board of administration to perform and provide modern dental care for all persons confined in state hospitals, charitable and penal institutions. A Pennsylvania⁶⁸ bill sought to provide for the establishment of a state institution for the study and treatment of malignant diseases. This bill was killed. A joint resolution which was introduced in the legislature of New Hampshire⁶⁹ sought to provide for the establishment of a children's hospital at the New Hampshire State Sanatorium. This resolution was killed. In Michigan⁷⁰ a law was enacted authorizing the state administrative board to appropriate all that land which is now owned by the state and inventoried to the Boy's Vocational School and comprising 914 acres, for a site for a new state hospital.

Federal legislation was concerned with free

medical treatment for World War veterans and with narcotic hospitals.

During the session of the 70th Congress approximately thirty bills were considered proposing to liberalize the existing law providing for free hospitalization and medical treatment for World War veterans for nonservice disabilities and diseases. None of these thirty bills was passed, and only one⁷¹ was even reported out of committee.

Additional Facilities for Veterans Planned

While the liberalization of the existing law providing free treatment for nonservice disabilities and diseases was not accomplished directly, such a result will follow indirectly the passage of legislation authorizing additional hospitals for beneficiaries of the World War Veterans' Act. That act provides that free hospitalization for veterans of all wars for nonservice disabilities and diseases shall be available so far as "existing government facilities permit." Obviously, if "existing government facilities" are enlarged, additional facilities will be available to provide free treatment for nonservice diseases and disabilities. Congress authorized the enlargement of "existing government facilities" by passing three bills. One⁷² of these bills authorizes an appropriation of \$15,000,000 for additional hospital, domiciliary and out-patient facilities for persons entitled to hospitalization under the World War Veterans' Act. Another bill⁷³ authorizes the appropriation of \$150,000 for the completion of a hospital annex at the Marian branch, National Home for Disabled Volunteer Soldiers, while another law⁷⁴ authorizes an appropriation of \$1,500,000 for the erection of a sanitary fireproof hospital at the National Home for Disabled Volunteer Soldiers, Dayton, Ohio. In addition to these three bills, which became laws, another bill⁷⁵ was favorably reported to the House during the closing days of the second session which would have authorized an appropriation of \$11,480,000 for more hospitals.

To Establish Narcotic Farms

Congress considered two bills proposing to establish Federal narcotic farms and hospitals. One⁷⁶ of these bills was enacted. This law authorizes the establishment of two Federal narcotic farms for the confinement and treatment of persons addicted to the use of habit-forming narcotic drugs who have been convicted of offenses against the United States. It also provides for the confinement and treatment of addicts who voluntarily submit themselves for treatment. The other bill⁷⁷ was killed. It proposed to establish a Federal narcotic prison hospital to be located

in the State of New York and to provide for Federal prisoners. Any of the facilities of the institution were to be made available, however, to such narcotic habitués as may be committed to such Federal prison or narcotic hospital by any competent court of record in the State of New York.

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Practical Administrative Problems: **Why Standing Orders Are Essential in the Maternity Department**

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THE maternity department is of the greatest importance both to the hospital and to its community.

To the hospital the maternity department offers an opportunity of rendering a service of incalculable value to its public. Yet such a service possesses dangerous potentialities if it is unscientifically and carelessly performed. Moreover there seems to be a tendency on the part of prospective mothers to depend in an increasing measure upon the maternity department of the hospital during all stages of pregnancy. Perhaps this is due in a degree to the change in the methods of modern living, perhaps to an increasing desire on the part of women to lessen the better understood dangers of childbirth. There is little doubt as to the effect the general increase in information in regard to matters medical has had upon the willingness of the public to use to a greater extent the facilities of the hospital. Indeed, in some localities, from 50 to 60 per cent of all babies are born in institutions.

Although the maternity department often represents the beginning of a service to the individual that is likely to be continued throughout her life, yet the volume of this work is decidedly fluctuating and hence the income derived from it is not truly representative of the service rendered nor is it in proportion to the expense the hospital must incur in maintaining an adequate personnel in this department.

Orders Must Be Carefully Formulated

There are many other problems confronting the hospital administrator that make the maternity department a difficult one to manage. The control of visitors to it is most difficult, and the acknowledged possibilities of infection require a vigilance of such a high order that physicians and nurses cannot afford to relax at any time in observing the most minute details in their technique. Hence, standing orders affecting the maternity department must be carefully formulated and the discipline necessary to ensure their being carried out must be rigid. These standing orders may per-

haps concern the nurse to a slightly greater degree than the intern. Yet to each they are of the greatest scientific and economic importance. To the patient and her child, they may be actually life saving. The standing orders of this department should concern themselves not only with the intramural facilities proper, but they should also fully describe the work of the prenatal and post-natal dispensaries.

Where Competence Is Required

It is a disquieting fact that the maternal and infant death rates in this country have not decreased in proportion to those of other conditions that have come under the scrutiny of medical science. This preventable loss of life in the case of mothers and infants is still tolerated in many sections. To be sure, increasingly effective and complete equipment is to be found in maternity hospitals which are often representative of the finest types of architecture. This was not the case a decade or more ago. But the refinement of operative technique and of routine professional procedures, particularly in the maternity department, for some unexplainable reason has not kept pace with these structural changes.

It is questionable whether staff supervision, as a general thing, is sufficiently intimate to prevent the practice of obstetrics in hospitals by those not sufficiently skilled to superintend difficult cases. Nor is it easy to understand why the progress and completion of labor are considered so routinely a purely natural process, requiring but little interference or skill on the part of the physician. Because of this fact perhaps, untrained interns and resident physicians are frequently permitted to supervise the delivery of patients.

Some months ago in this magazine there appeared a series of articles¹ covering the question of whether the maternity department could safely be conducted in conjunction with the general hospital. Some distinguished authorities contended

¹ De Lee, Joseph B., What Are the Special Needs of the Modern Maternity? *THE MODERN HOSPITAL*, March, 1927, p. 59; Williams, J. Whitridge, Is an Architecturally Isolated Building Essential for a Lying-in Hospital? *THE MODERN HOSPITAL*, April, 1927, p. 58.

that the presence of the maternity department in the general hospital is a safe and efficient arrangement. But when the maternity department represents a division of the general hospital and its intern service is supplied from the general intern staff, certain precise and definite regulations must be instituted that will tend toward the isolation of these young physicians while they are performing obstetrical work. It is not altogether necessary for obstetrical interns to be separately housed when they are assigned to this service; yet in some institutions this is felt to be a safer arrangement. Certainly a standing order should exist to forbid the maternity staff physician from examining a case of erysipelas or of purulent infection; nor should the interns be permitted to visit the morgue or perform certain laboratory work that brings them in contact with virulent bacteria. Such standing orders cannot be too strictly enacted and enforced.

Definite rules should also be drawn up describing and limiting the responsibility the intern or resident physician may take upon himself in the handling of routine cases. In many institutions, interns are permitted to supervise all normal deliveries. An interpretation of the word "normal" is, of course, necessary, and it is only when this term is loosely defined that these young physicians are likely to encounter trouble. When a resident physician is on duty in the hospital proper or specifically in the maternity department, it is an effective method to require that he interpret the term "normal" insofar as it applies to specific cases. The visiting obstetrician usually has several assistants. If no well trained resident physician is at hand, then an assistant staff surgeon should be summoned in cases in which a labor is unduly prolonged or in which actual abnormalities in its progress are encountered. The use of forceps by the intern or the practice of the performance of version or of any of the other major obstetrical procedures should be forbidden without the proper supervision being at hand.

Limiting the Intern's Responsibility

It is difficult to understand why an intern is routinely prevented from performing without supervision a major abdominal operation when he is frequently permitted to take charge of a difficult delivery in which a dual responsibility—the saving of two lives—exists. Strict and explicit standing orders should exist relative to the amount of responsibility the intern may take, and no personal admiration or acquaintance between the chief and the intern should be allowed to alter this arrangement. A definite statement should also be found in the standing order book as to the

definition of the term "morbidity," insofar as it applies to the maternity patient. In some institutions, the maternity patient is said to be abnormal if she runs a temperature of one hundred or over on two separate days of the puerperium after the first twenty-four hours following delivery have elapsed. A definite understanding as to the meaning of the term "abnormal" therefore is essential.

Rules relative to the reporting of such conditions should be definitely set down and there should be no uncertainty about the dividing line that separates the normal events of the puerperium from those that are abnormal. Too often it seems that an attempt is made to depreciate the true meaning and significance of a rise in temperature following delivery, its appearance being excused because of the existence of some minor abnormality of breasts, nipples or lochia.

What Shall the Records Cover?

As to the preventive medicine angle, the work of the maternity department should carefully provide for the isolation of suspicious infectious cases. The enactment of strict rules relative to the isolation for forty-eight hours of all patients coming to the maternity department who are unknown to the dispensary is but a reasonable precaution. Any patient with a suspicious vaginal discharge should likewise be removed from the proximity of those not so infected.

The usual understanding of the nature of pregnancy and labor in which these states are considered as purely normal and physiologic has led to a careless method of compiling the records of the medical and surgical work of the obstetric division. Definite rules outlining the nature of these records must be laid down. Printed history forms of the "Yes and No" variety are usually relatively worthless for statistical purposes, even when they are faithfully executed. The standing order book should contain specifications for routine history taking. Such records should contain adequate identification data, a full description of the past medical history of the patient, with definite and concise statements in regard to the menstrual history and former pregnancies or miscarriages. A complete record of events pertaining to the general health of the patient and a full description of the results of general and special examinations, laboratory or other specialty studies should precede the statement of a provisional diagnosis.

These data should be followed by a full description of the labor, of the placenta and cord, of the postpartum progress of the patient and of her condition at the time she was released from the hospital. In the child's history should be included a complete description, with standard measure-

ments of the baby, including fingerprints and footprints of the mother and child. In the general hospital the consultation services of the specialist are available, and standing orders relative to the full utilization of all such services should be enforced.

Standing orders covering the management of the dispensary are important. Definite regulations relating to the studies to be made at the time of the first visit of the patient should be set down and should include the initial interview with the representative of the social service department, at which time the social and financial status of the applicant is learned. Even patients who are admitted to the hospital ward as emergency cases should be interviewed when their condition warrants this procedure. When patients who have been studied in the dispensary apply for admission to the hospital, admission cards should be required in order that proper service assignments may be made. It is usually the duty of the chief resident physician to supervise each admission and to decide, in view of the emergency nature of the case, whether it is to be sent directly to the delivery room or given an admission bath and placed in a ward bed. A regulation specifically requiring the recording from time to time of the physical progress of the case is usually necessary.

Every Detail Should Be Listed

After the social service interview in nonemergency cases has taken place, the patient should be taken to an examining room and placed in charge of the nurse. Definite regulations relative to disrobing and to further preparation for the initial examination should be set down. It should be the duty of the nurse who first received the patient to prepare her for examination by making certain that the patient's bladder and bowels have been recently emptied. If possible, a specimen of urine should be secured at this time or, if not, the patient should be instructed to bring a morning specimen on the next visit. Regulations in regard to the technique of the first dispensary examination are of the utmost importance. This should be both general and local and should consist of a thorough inspection of the patient's teeth, nose, throat, tonsils, neck (with special regard to the thyroid gland), heart and lungs. Particular reference to the condition of the breasts and nipples should be made on the history sheet.

In the scope of this article, it is not possible to describe thoroughly the proper methods of inspection, palpation and auscultation of the abdomen. It is sufficient to note that the most careful studies should be made both externally and internally in order to determine the position and size

of the fetus and the comparative dimensions of the pelvis and of the fetal head.

Definite regulations in regard to the nature and frequency of vaginal examinations are of the utmost importance. Most standing orders forbid vaginal examinations after the eighth month of pregnancy. In all cases strict aseptic-antiseptic precautions should be taken. Carelessness in this matter on the part of the visiting or resident physician is likely to lead to serious complications later. This fact is so well known that it is not necessary further to emphasize the dangers of postpartum infection.

In addition to a complete physical examination, most standing orders require blood pressure examinations at each visit, a chemical and microscopic analysis of the urine and in certain other patients a thorough chemical and microscopic examination of the blood. When dispensary cases show a tendency to toxemia, renal and hepatic functional tests are indicated. If patients applying to the dispensary show any evidence of a purulent vaginal discharge, frequent smears should be taken and bacteriologic studies made.

Standing orders covering the work in the dispensary frequently include more than requirements for the mere examination of patients. An excellent opportunity is offered here for contact between the dietitian, the occupational therapist and the patient. While patients are waiting their turn for examination, for example, a dietetic class may be held and in the case of members of the lower economic group, the occupational therapist may demonstrate the method of making proper yet inexpensive clothing for both the mother and baby. Perhaps the most difficult and important rule to enforce, however, is that covering steps leading to the early recognition of pretoxemic states.

Rules Concerning Gowning and Bathing

The proper conduct of the maternity wards themselves represents perhaps the most important need for the formation of comprehensive standing orders. The problem of controlling visitors is difficult. All students, as well as visiting and resident physicians, before entering the wards, the operating rooms, the delivery rooms or the nursery must be requested to remove their coats and to wear the gowns provided by the hospital. This same regulation can and should be enforced at the visits of members of the patient's family. A troublesome angle of this problem is that which concerns itself with enforcing this regulation in the case of visitors to the private department. To require gowning on the part of these persons is a difficult task since they are likely to think that

the patient to be visited is suffering with a contagious disease rather than that the hospital is doing everything possible to protect the patient and her baby.

Regulations concerning the bathing of new patients on admission are important. In most institutions, all maternity patients, except those who are extremely ill, are given a general admission bath. This is followed by such local preparation as is ordered by the physician. Regulations relative to the performance of certain initial studies should be set down and should include such commonplace steps as weighing the patient and recording her temperature, pulse, respiration and blood pressure. These studies should be made at least twice a day at specified hours prior to delivery and three times a day following the conclusion of labor. In cases in which there is any rise in temperature, these observations should be taken every third hour. The immediate examination of urine on admission is important and, in toxic cases, the specimen should be obtained by the use of a catheter and an immediate report requested from the laboratory. Standing orders covering the procedure of catheterization are extremely important and should be fully described in the hospital standing order book. The methods by which sterility is to be maintained, including the preparation of the catheter, the scrubbing of hands and the cleansing of the patient, cannot be too specifically described or too strictly enforced.

Describing Each Step Minutely

In the standing order book covering the maternity department the description of each step in the preparation of the room and the conduct of the labor should be set down. No bed covering used in the patient's room should be allowed to be transported with the patient to the delivery room. The articles making up the delivery, dressing, infant, drug and hypodermic trays should be accurately and painstakingly enumerated with a complete description of the methods by which the work centering around their use in the maternity department is to be performed. A complete and definite standardization of these trays is of prime importance and this step will prevent the presence of the rather careless collection of miscellaneous instruments and supplies that is too frequently found on such trays.

In hospitals with a courtesy staff, the members of which are permitted to work in the maternity department, much difficulty is experienced in obtaining the adherence of these physicians to the proper technique as prescribed by the institution. Definite regulations relative to removing all street clothing, including shoes, and to enrobing in

operating room suits, caps, masks and clean surgeons' shoes should be enforced in regard to this staff as well as to the official staff of the hospital. There is no good reason why the hospital should not insist upon a routine method for the preparation of the hands. This should also hold true in operative cases in regard to the sterilization of the skin of the abdomen of the patient.

No Place for Individualistic Technique

Faulty work and the expenditure of an excessive amount of money are almost sure to result if staff members are permitted to practice an individualistic technique and are not required to adhere to regulations affecting the whole group. Such small matters as the avoidance of the use of a towel for the drying of hands of the operator after scrubbing and the observance of the proper method of applying gowns without touching the neckband should be fully covered in the book of standing orders. After the gown has been donned, however, most rules touching on this subject permit the removal of the remaining moisture on the hands with a sterile towel. It is usually considered that the drying of the hands before putting on the gown is improper technique. Attention has been frequently called by careful physicians to the fact that even though a sterile sheet may cover the unsterile abdominal skin of the patient that palpation of the abdomen through the sheet with sterile hands is a dangerous practice. A small amount of moisture on the sheet makes possible the passage of infection.

Most professional standing orders limit the number of vaginal examinations that may be made during delivery and it is usually stated that no such examination shall be carried out unless the progress of labor is definitely halted and then it should always represent a clean surgical procedure. The administration of an anesthetic should be governed by strict regulations and none should be given by the intern without his having received definite instructions from his chief as to the proper course to pursue. It is usually stipulated that ether is the anesthetic of choice. In certain cases, under the direction and orders of members of the attending staff, the so-called "twilight sleep" which consists of scopolamine and morphine anesthesia, may be used. This is usually done only on the written order of the visiting obstetrician.

Definite instructions in regard to the type of diet to be given patients are properly included in a book of this sort. These usually cover routine cases only, but major variations from such a dietary regimen are made only upon the specific instructions of the physician in charge. All pa-

tients, both before and after delivery, are routinely served generous trays. Those who have received an anesthetic are restricted to liquids for the first twenty-four or forty-eight hours. A rise in temperature is usually not considered an indication for the ingestion of liquid food only unless there exists some special contra-indication to a more generous diet.

Standing orders should describe the method and time of cleansing the patient's gastro-intestinal tract. It is frequently a standard procedure to administer a simple enema prior to sending a patient to the delivery room. Patients are usually held in the delivery room for at least an hour following delivery and then are placed in the recovery ward before they are transferred to the general area. A nurse is usually required to remain with the patient for at least two hours following delivery. Definite regulations should be made in regard to the hygienic management of the patient during the first week following delivery. Usually patients with no complications are allowed out of bed on the eighth day and are discharged on about the thirteenth to the fifteenth day.

Final Examination Is Important

The final examination of the patient is of the greatest importance. Unless the details of this examination and the recording of the findings are thoroughly understood by the resident physician, the records in the majority of instances will be found to be incomplete. A general physical examination, less thorough perhaps than that made on admission, should be made. Dependent upon the wishes and practices of the obstetrician will be the insertion of a rule requiring that a vaginal examination be made at this time. The patient on discharge is given a postnatal card and is definitely informed as to the date upon which her return to this clinic is expected.

In order to render such a list of orders complete, definite regulations regarding the care of the umbilical cord are necessary. The preferences of the general staff in regard to this matter should determine the nature of the paragraph on this subject in the standing order book. This is also true regarding the care of the baby's eyes. The technique of this procedure is so well established that it has become almost routine the country over. Notwithstanding this, it should be fully detailed in the maternity order book. The oiling and bathing of the baby and the recording of its measurements and weight are steps that should be carefully described. Professional standing orders usually detail the technique and the time of the repairing of perineal lacerations, as well as that of the application of forceps.

A pediatrician is usually placed in charge of the conduct of the nursery. For the information of the floor nurse, a definite nursing schedule is usually set down as well as the length of time the baby is to be allowed to remain with its mother. Frequently also there appears in this book a milk formula which is to be employed to prevent the initial loss of weight. A sample formula is as follows: whole milk, twelve ounces; boiled water, twenty-four ounces; milk sugar, one ounce.

It is customary for all babies to be weighed daily, preferably before the morning bath. Bathing schedules should be carefully outlined, as well as the time schedule for the routine recording of temperatures. A description of such abnormalities as jaundice, eruptions, swellings, discolorations, discharge from the eyes, elevation of temperature, pulse, respiration and the number and character of bowel movements should be required. Perhaps even more frequently than is the case with the charts of mothers are the records of babies likely to be incomplete. A social chart for each baby is usually required.

When listing definite duties of the maternity intern, standing order books usually show specific requirements as follows: to initiate treatment in all emergencies; to keep accurate records of all mothers and babies before, during and after delivery; to prepare and forward to the proper authorities all birth certificates; to report promptly to his chief all complications arising in the case of either mother or baby; to instruct all patients to return to the dispensary, the first visit being two weeks after the date of discharge; to set down completely the final description of the condition of both mother and baby on discharge.

It is suggested that a monthly staff meeting be held in which the general progress and degree of efficiency of the obstetric work being performed in the department be frankly and fully discussed.

France Builds Its First Skyscraper Hospital

The first skyscraper hospital in France is that to be built in the Paris suburb of Clichy. It is to be about twelve stories high.

The new hospital may mark a new period in French architecture, says *The Hospital*, since a decree of 1902 fixes the maximum height of buildings in France at 66 feet, while the new hospital is to be about 132 feet.

The hospital at Clichy, in which there will be between 900 and 1,600 beds, is to take the place of the old-fashioned but justly famous Beaujon Hospital, which was built in 1784. The object in making the hospital more than twice the usual height is economy. It is proposed to have fast moving elevators that will save time and money.

Editorials

Through the Eyes of the Patient

THAT those things that appeal esthetically or serve to minister to the spiritual or physical comfort of the patient often determine his estimate of the efficiency of the hospital, is a generally accepted fact. Indeed, evident attention to relatively minor details often appeals to an exacting member of the hospital's community while gross errors of aseptic technique go unnoticed because the patient has no knowledge of methods by which such defects may be judged. Whether his reception on admission was cordial, his room quiet, his food warm and well cooked, the floor nurse tactful and the atmosphere surrounding his convalescence cheerful—these, to him, are the ultimate tests, the *sine qua non*, of a well conducted hospital.

How much more important to him, to his chances of preserving his very life, are the dozen and one steps before, during and after an operation than are the creature comforts which the patient appreciates when they are afforded him. When they are conspicuously absent he is almost certain to raise his voice in protest. How much more obligated is the hospital and its staff to make safe those procedures about which the patient knows nothing, yet which he trustingly accepts. To cater to the physical comfort of the patient is economically wise; to minister scientifically to his medical needs is but keeping a community trust.

A Study in Personality

WHAT is there in the practice of hospital surgery that generates the interesting and yet frequently disturbing personality traits often displayed by members of the surgical staff?

Perhaps the vagaries of temperament, the tendency to irascibility and the insistence on immediate compliance with the surgeon's demands for subservient attention, are the manifestations of personality idiosyncracies inherent in the man and not developed by the high tension life necessary to his calling. Yet such traits are too often observed to be considered accidental. Furthermore, usually such unreasonable bursts of temper are partly deliberately calculated attempts to promote future subserviency and perhaps partly they are

uncontrollable. Whatever the cause, sarcastic public reference to the faults of assistants, interns and nurses, cannot be repeatedly covered by the mantle of charity and are hence in no way excusable.

Perhaps such an attitude is adopted to divert attention from the surgeon's own incapacities. To wax profane, to toss offending instruments about, to display mannerisms never displayed under ordinary circumstances, are breaches of good form that will not be long tolerated in well conducted hospitals. Sometimes the most grievous offender is the chief surgeon himself. And often his caustic comments are directed toward the hospital, its management and managers in general.

Rarely does one observe such conduct in other staffs of the hospital. Perhaps the work of the clinician generates greater composure and self-control. Mayhap only those who live on high nervous planes become distinguished surgeons. Whatever the cause, no individual or group of individuals must be allowed to destroy a hospital's morale or to mistreat the personnel, the members of which are striving honestly to perform their work well. A warning to the offender, by the board of trustees, should be issued. If not heeded it then becomes the duty of these managers to take more drastic action.

Twelve Million Dollars Thrown Away

DURING the year July 1, 1929, to June 30, 1930, in the state of Ohio alone 21,905 automobile accident cases were treated, according to the report compiled by the Ohio Hospital Association and recently mailed to the members. The cost to the hospitals totalled \$691,347.24 of which \$346,967.34 was uncollectable. These figures represent only 85 per cent of the bed capacity of the state and if carried out for the full 100 per cent of the beds within the state in general hospitals the amount lost would amount to \$406,761.24—within striking distance of a half a million dollars.

There is significance in this study because if we may apply these figures to the entire United States the loss to the hospitals of the United States each year through automobile accidents amounts to the staggering sum of \$12,739,272.66—enough to support a 7,000-bed hospital for a full year. As there are no hospitals of that size, perhaps we can better visualize the situation if we say that the amount lost each year would maintain all of the general hospitals in the states of Maine, Vermont, New Hampshire and Rhode Island.

Something must be done about a loss as large as this, passed on each year to the pay patients in the hospitals or to the taxpayers. It would have been interesting, further, to find out how many of these automobile accident cases were residents of the state of Ohio and also how many of them carried insurance—insurance collectable by the hospital for the care given. It should be the earnest endeavor of the American Hospital Association, of the Catholic Hospital Association and of the American Protestant Hospital Association to devise ways and means of stopping this leak, one of the largest and most serious that exists in hospital administration to-day.

We are told that because of its emergency nature this type of case cannot well be refused admission when application is made to the hospital. We are further told that many of these patients are irresponsible and when they leave the hospital they leave without even going through the formality of promising to pay. Insurance companies state that the law does not allow them to reimburse anyone but the insured.

All of the foregoing is probably true and with these facts in mind, plus the startling fact that the hospitals are losing more than \$33 a day, the national associations should start out in earnest to help their members. If their efforts combined with the efforts of the state associations can collect for the hospital more than twelve millions of dollars, the three or five dollar membership or the fifty dollar a year membership has justified itself.

Incidentally the Ohio Hospital Association is to be congratulated upon this fine piece of work for its members. Every state hospital association should again follow the lead of the pioneer state association in actually giving to its members something better than an annual meeting.

Questions and Answers

HOW is my mother to-day? Such is the query that the always well meaning, frequently overworked and sometimes discourteous hospital telephone operator receives many times a day. It is a question that the public has a right to ask and the hospital a duty to answer. But is the distraught relative being given in kindly and sympathetic tones and words the information he seeks? Routinely, too routinely, the answer is couched in a phraseology that is often neither satisfying nor kindly. To be told in a matter of fact way that a patient is doing as well as can be expected or to be abruptly, yet not uncivilly notified that no such information can be given over the telephone is

hardly the proper way to create public confidence.

Just as frequently are anguished relatives observed wandering about the stately halls of an otherwise splendid institution endeavoring to find someone who amidst the stern search for efficiency has the time and ability to discuss for a moment the chances that their loved ones have for recovery. The social service worker does her best to satisfy the psychic needs of such anxious seekers for comforting information but she is usually not informed as to the intimate medical condition of the patient. The doctor is on his own authority too busy. He is inclined briskly to dismiss the inquirer with a few words, kindly meant, but withal meaningless. And so the anxious one continues to entertain disquieting thoughts.

A bureau of information, office hours for the medical director or his assistant, the presence on the ward of the intern during visiting hours and of kindly and informed telephone operators have all been suggested as solutions for the difficulty. Certainly many institutions are falling far short of their duty in ministering to the mental needs of those whose suffering is frequently just as real as is the physical distress of the patient. Not less efficiency but more humanity would not be amiss in some of the hospitals in the field.

The Care of the Sick Convict

PUBLIC opinion is divided as to the type of care that should be given the man or woman who, having offended a civil law, becomes ill in prison. Such medical treatment ranges in various localities from the most ineffective and brutal, to care equal to that given by the average general hospital. Indeed, just as there are to be seen evidences of prison neglect that should cause citizens of this enlightened country to hang their heads in shame, so are there examples of the finest type of humanitarianism evidenced in our jails.

To save life is the plain duty of all those who profess to be true followers of Æsculapius. Yet it cannot be denied that too often the prison physician is in a rut, that he is careless and ineffective. Partially explanatory is the fact that he is without proper equipment and instruments and that he is able to secure nursing service that consists of only the casual and untrained help of the patient's fellow prisoners. The too frequent public belief that anything is good enough for a convict does not ameliorate an already troublesome situation. Here untreated lues, dermatoses of all types, tuberculosis, malignancies, as well as not a few more acute pathologic states often go unrec-

ognized and untreated. Sanitation of the worst type, coarse, medically unsuitable food and the hopelessness of incarceration must often render the lot of the sick convict almost unbearable.

Yet in the scientific and humanitarian sunlight of the twentieth century, the dark cloud of such medical atrocities is permitted to cast a shadow over our civilization, sometimes without, but often with the knowledge of the public and its official representatives, the prison trustees. To plead lack of funds with which to provide hospital facilities for sick prisoners is to beg the question. More explanatory of the condition is the attitude of a majority of citizens who, because of an indifference born of selfishness or a lack of information, often permit prisoners to undergo a grade of medical treatment less humane and scientific than that usually given to animals.

Should not a comprehensive study of the whole subject of prison medicine be made? Perhaps from such a study would be evolved standards that would bring about needed improvements in the hospitalization and treatment of ailing men and women who, justly or unjustly, have been deprived of their liberty and their citizenship.

In the Sweet Name of Charity

MANY are the sins of omission and of commission perpetrated in the name of charity.

While one institution dispatches handkerchiefs by mail and charges an unreasonable price for them, another begs merchants for a present of their profits on a bill of goods. Often shrewd commercial interests represented by oily high-powered salesmen scent the appeal that always is inherent in any charitable venture and are not at all loath to profit by it. Catching a distraught superintendent off his guard, they convince him of the immense possibilities of a mail or house to house merchandising campaign. Ethics to them is but a name—it is the dollar that counts.

But the ultimate in magnitude of conception and of financial proportions in its execution was the sweepstakes drawing held recently in Dublin, Ireland. The prizes were announced in thousands of pounds sterling. More surprising still was the evident governmental stamp of approval that this lottery bore. Yet games of chance in the interests of hospitals are not entirely strangers to certain localities in this country. How much better would it be if selfish interest could be divorced from the business of raising money for the care of the sick. Too frequently the overhead of so-called hospital drives is out of proportion to the amount actually

spent for the construction of the hospital or the purchase of supplies.

While it is better to secure half a loaf than no bread at all, nothing justifies a lack of ethics, of business sense or of regard for the fitness of things.

Student Government for Nurses

EVERY year a great throng of young women troops blithely through the doors of the hospitals of this country to undertake the serious business of learning to care for the sick. Almost as legion as their number are their antecedents. They come both from homes of culture and from family circles where the advantages of education have not been available to either father or mother. Some have felt the restraining hand of an understanding parent while others have yet to learn both obedience and self-control.

While the student nurse of to-day often is possessed of a certain sangfroid—a definite worldly-wisdom that her sister of a quarter of a century ago did not have—yet as a rule she is almost always younger in years. Twentieth century living with its opportunities for travel, with its inevitable elevation of the horizons of life, has produced a young woman of greater average intelligence and one who is perhaps less likely than her sister of even a decade ago to be unprotestingly satisfied with the decisions and judgments of the group. That she is an individualist none can deny. For these and many other reasons the discipline of training schools is becoming less military and more rationally individualistic.

Self-government seems to be a workable principle which has proved its usefulness in schools for nurses. Yet the wise directress maintains a firm if not always visible control on the disciplinary conduct of her school. To grant only those privileges of group determination that have been earned, to require such an organization to learn to walk before it is permitted to run, to advise here and caution there, are all functions of the directress of nurses in her relationship to the student council. To conclude that the young woman of the twentieth century is capable of governing herself, to believe that she is always able to act wisely in both personal and school matters is certainly to court disaster.

Militarism should be banished from our training school practices, discipline should be rational but firm, and self-government by each individual must be the end sought. Most of these aims can be and are being effectively met by the well conceived and wisely conducted student government associations in the leading hospitals in the field.

Abstracts of Hospital Literature From Foreign Countries

A Department Conducted by E. M. BLUESTONE, M.D.

Director, Montefiore Hospital, New York City

THE MUNICIPAL PAVILION AT THE HAGUE FOR EXOTIC INFECTIONS

By Dr. E. A. Koch, Director of the Municipal
Hospital

A new group of pavilions has been constructed exclusively for the care of patients suffering from the exotic infections such as the plague, smallpox, typhus exanthematicus, and cholera. For years the incidence of exotic infections in The Hague has been small. In the year, 1929, however, sixty-five cases of smallpox were reported.

These buildings were erected on a large plot in the dunes on the outskirts of the city. The pavilions are single story and consist of four units, each with its own utility block and single rooms for patients as well as for nurses. In the compound of buildings there is a residence for the gatekeeper, a separate structure for the handling of infected clothing and finally a mortuary which includes a department for gross pathology.

Additional barracks are available for quick service in the event of an epidemic. These barracks are stored in units that can be assembled at short notice. The ground in the immediate neighborhood of the pavilions has been smoothed and hardened and is available for such expansion.

ULTRAVIOLET RAY LAMPS

By J. L. C. Wortman, M.D., Hilversum

The author describes two recent acquisitions to the armamentarium of the department of physical therapy. Both are lamps that radiate ultraviolet rays of low intensity, giving the advantage of continual treatment over longer periods. In a measure they are able to supply "sunlight" at times and in places where the percentage of ultraviolet rays is relatively depressed.

In order to obtain a maximum of radiant energy both of these lamps are fitted with a reflector which makes it possible to focus the radiation and control the quantity of light in accordance with the needs of the patient. One lamp is a German product. The other is the product of a company in Holland. At a recent meeting of the Dutch Medical Association, Professor Tengbergen, radiologist, Amsterdam, demon-

strated both of these lamps and thought that they were a valuable addition to physiotherapy. Technically they are easily handled and are much cheaper than the artificial sunlight apparatus thus far used. There is no difference in the quality of the wave length of the ultraviolet rays though the quantity delivered is reduced.

The quantity of useful ultraviolet rays differs in both of these lamps. One delivers 1/60 and the other 1/20.

THE QUESTION OF JURISDICTION IN MUNICIPAL HOSPITALS

By J. C. L. Wortman, M.D., Hilversum

The authorities in Holland have appointed a judicial tribunal for the purpose of passing judgment on conflicts that arise in public hospitals. This tribunal consists of one or more professionals besides representatives of the municipality and other higher government officials.

The tribunal is largely of a political nature and has been organized for the purpose of sitting in judgment upon all disciplinary cases that arise in hospitals not excluding the lesser rebukes meted out by the hospital administrator. The judgment of this court is binding on both parties and there is left no appeal to a higher court. Of late it has happened that the administrator was put in the wrong by this tribunal because of differences of opinion concerning the extent of misdemeanors in the hospital and their punishment. This happened in a recent notable instance in Rotterdam and was the immediate cause of the resignation of Dr. H. Burgerhaut, one of the delegates to the first international hospital congress.

In an article entitled "*Hodie Mihi, Cras Tibi*," published in *Het Ziekenhuiswezen*, Doctor Burgerhaut tells at length of his reasons for being unable longer to assume the responsibility for the administration of his hospital. It seems to have been a case where the administrator was given responsibility without power. The exciting cause for his resignation was a seemingly trivial incident, which may, however, have been the straw that broke the camel's back. A large quantity of butter had dis-

appeared from the storeroom and was later discovered in the locker of one of the kitchenmaids. The two employees who were charged with the supervision of the supplies were accordingly punished by the director. The judicial tribunal was called in to review the circumstances, with the result that these employees were acquitted of any blame on the ground that they could not be held responsible for the thefts of subordinates.

There was another recent instance of the resignation of a prominent woman administrator of a municipal hospital in Schiedam, who gave as her reason political interference with her work. The editor deplores the fact that the director of a municipal or state hospital in a democratic country like Holland often requires "more political sense than social and medical qualities." He seems to be under the impression that the solicitude for the personnel in these hospitals is given more importance than the care of the patient.

THE EDUCATION OF NURSES IN AMERICA

By Heleen A. Melk, Instructress of Nurses,
The Hague

In this, her thirteenth and final article on the subject in *Het Ziekenhuiswezen*, the author continues to relate her experiences while studying the problem of nursing education in the United States. This article presents a summary for those that came before and the points that seemed to impress themselves most on her mind are the following:

1. The desirability of enlisting the interest of a special educational committee selected from the trustees of the hospital in which the school of nursing is active.
2. Lowering the age of admission for student nurses to the school from twenty to nineteen years.
3. The payment of a minimum salary to student nurses to cover immediate personal necessities and no salary at all during the period of probation.
4. The increased requirement of preliminary education to three years of high school.
5. The inclusion of maternity nursing in the regular three-year curriculum (in Holland obstetrical nursing requires an additional year of training).
6. Closer association between theory and practice of nursing and more cooperation between the medical board and the nursing faculty; greater control of the practical aspects of nursing education.
7. Better understanding of the problem of securing suitable instructors and ways and

means for educating this group in a special and organized way.

The editor calls attention to the articles by Miss Melk and has a complimentary word for the high standard that has been reached by the nursing profession in America.

"NOSOKOMEION"—THE INTERNATIONAL HOSPITAL REVIEW

News has been received of the publication by W. Kohlhammer, Stuttgart, of the first international journal devoted to the interests of the hospital. This journal will be published as a quarterly hospital review and will appear under the name *Nosokomeion* in French, German and English. The International Hospital Association is sponsoring this new publication.

The editorial staff consists of W. Alter, Düsseldorf; E. H. Lewinski Corwin, New York City; A. Gouachon, Lyons; R. H. P. Orde, London, and René Sand, Paris. There is in addition an editorial board consisting of representatives of the hospital world in the more important countries.

According to the announcement, "The development of the hospital is a matter of international significance." The journal promises to set forth "the practical and methodical integration of the hospital with social-hygienic interests and will be devoted to the interests of the people of all the nations." The journal will be dedicated to the First International Hospital Congress.

The table of contents for the first number indicates that it will be divided into three parts: the relationship of the medical profession to the hospital, varieties of service to patients in hospitals and the administration and management of hospitals.

The publications for the year 1931 will appear in January, April, July and October. Each number will have about 146 pages and will be available for subscription at the rate of 12 R. M. (\$3) per year.—E. M. Bluestone, M.D.

The Story of Work in a Naval Hospital

One of the most interesting books relative to hospital work that has come out in some time is the story of the oldest naval hospital and medical department of the navy, by Capt. Richmond C. Holcomb, M.D., F.A.C.S., of the medical corps, U. S. Navy.

Captain Holcomb has titled his book "A Century with Norfolk Naval Hospital." This prosaic entitle does not do the book justice because romance, adventure, advancement of science, history and the story of the growth of our country are all embodied in this truly entrancing document. While essentially historic in nature, Captain Holcomb's story reads more like well written fiction.

YOUR EVERYDAY PROBLEMS

A department devoted to the informal discussion of problems arising in the everyday life of the hospital superintendent.

[No attempt has been made to offer final conclusions relative to the questions considered in this department. THE MODERN HOSPITAL will gladly welcome further comment by its readers on any of these problems, or the presentation of other queries for discussion in later issues.—Editor]

Should Newborn Children Be Routinely X-Rayed for Evidence of a Persistent Thymus?

It cannot be gainsaid that deaths have occurred in the newborn because an enlarged thymus gland was not promptly discovered. While the percentage of persistent thymus glands in the newborn is not large, yet it would be far better for the hospital to spend any necessary sum to prevent possible harm in the rare case in which such a condition exists. It is easy indeed for the general rule to be issued by the superintendent that the infants of all ward mothers shall be sent to the roentgen-ray department for study. Moreover, it has been found that when an enlarged thymus is present one or more x-ray treatments produce beneficial results.

When a large portion of the patients in the department are treated by private physicians the problem becomes more complicated. Does the institution have a right to insist upon x-ray examination of such babies? If so, shall the patients be charged for it? It seems that the physician in charge of such patients has a right to direct all types of treatment prescribed for his patient. Certainly if the hospital requires that all of the newborn be so studied, it cannot in fairness charge for this. On the other hand, in these days of modern obstetrics, few physicians would object to such a procedure. The chief of staff of an obstetrical department should be able to arrange for the general acceptance of such a rule. If necessary, in order to avoid criticism on the part of private patients, the hospital should bear the expense of this study as well as of the necessary treatment should an enlarged thymus be found.

What Are the Hospital's Charitable Obligations to the Community?

In some institutions it is felt that an obligation exists on the part of the hospital not only to care for those of the community who are ill but also to furnish food and clothing to the poor and needy in the immediate vicinity of the hospital. No definite line can be drawn which separates the hospital's responsibility from the standpoint of treating the sick from that which concerns itself with the proper maintenance of health and strength in the family proper by supplying food, clothing and housing. It is felt by most organized charitable organizations that if the hospital performs its duty in the prevention and cure of disease the social service obligations relative to the feeding of the poor should rest upon other shoulders.

In one institution in question, each morning a large number of men, women and children applied at the rear

door for food remaining from the previous day's meals, as well as for the routine dispensing of milk, bread and other standard food staples. It is very much of a question whether the hospital has a right to use in this manner the funds it secures from community donations. There should be some organization to which such persons could be referred. Moreover, the members of the hospital's personnel are too busy to dispense such articles.

The purchase of drugs and other necessary medical and surgical supplies for ex-patients is often delegated to the institutional social service department. In a measure, perhaps, such a practice is necessary. And yet, unless the funds of the hospital are inexhaustible, it is possible that an abuse can arise from this practice that will detract from the type and the efficiency of the care the hospital is able to give. Most communities meet such extra institutional demands with noninstitutional funds. The hospital, it appears, should consider as its major effort the prevention and relief of disease and should refrain from expending community funds on matters semimedical which could be met by other individuals and organizations.

Can a Patient Be Refused Discharge If His Chart Is Not Completed?

If a hospital is to perform its best service to the community, the records of patients of all types must be both complete and accurate. In many institutions, too little attention is given to this matter. In hospitals without intern staffs, the completeness of clinical records is considered important but, at the same time, somewhat impossible to attain. In others, the hospital administrator is required to exercise the greatest amount of force in order to bring about any approach to properly written histories. It is a regrettable and yet, at the same time, a well known fact that the visiting staff is less likely to be as persistent in demanding proper clinical records as is either the superintendent or the paid resident staff. Perhaps this is brought about by the pressure of work and a lack of time and interest in details on the part of the physician. And yet in those hospitals in which the greatest success has been attained in securing proper clinical records, it is the resident medical staff that has borne the brunt of such a campaign.

Frequently a rule exists that forbids the discharge of a patient until his records are complete. Such a regulation is certainly justifiable in most instances, and yet, exceptions must be made. Certainly the patient should not be punished because of the failure on the part of the intern properly to attend to his duties. Nevertheless, it must be recognized that a history written after the departure of the patient from the hospital is likely to be neither complete nor accurate. It is perfectly proper for a rule preventing the discharge of patients until their charts have been completed to be in force. When for any reason, how-

ever, resident physicians are lax, the patient should be permitted to depart and the intern required to give an accounting for such an occurrence. Such a regulation would be obviously unfair if private patients would be required to pay another day's board because of a failure on the part of interns to complete their records. The hospital cannot be placed in the position of depriving a patient of his liberty because of a failure in any of its functionings. On the other hand, the viséing of charts prior to the discharge of patients is a commendable procedure and with few exceptions such a requirement will bring about a greater promptness on the part of those responsible for the assembling of the clinical data covering the study of each case.

Who Should Supervise the Night Meal?

The midnight dinner is a necessary hospital evil. Perhaps less attention is given to the economic and medical side of providing proper food to the night personnel of the institution than to any other dietetic activity. In small institutions, nurses and others are sometimes permitted to visit the institutional icebox and to partake of whatever food is found there. In other hospitals, a night chef is provided who prepares in a far from careful and efficient manner the food for this group. Sometimes the conduct of interns and nurses at this meal is subject to criticism, and food supplies are misused and wasted. Too frequently keys for the general icebox are placed in unreliable hands and food is purloined or consumed in amounts not compatible with the immediate necessities.

The dietitian and her assistants, except in large institutions, cannot exercise any real supervision over this meal. While they can check out from their general stores sufficient raw material to provide for the needs of the night personnel, usually their efforts must and do end here. It should be as easy to apportion raw materials for a night supper as for a midday meal. It is equally true that there is little excuse for the slipshod and haphazard methods so frequently observed. Night nurses deserve the same well balanced diets as do those employed during the day. Nurses, doctors, attendants and others not actually caring for the sick from 7:00 p. m. to 7:00 a. m. should not be granted the privilege of this meal. The night superintendent of nurses is usually the person who must be made responsible for supervising the preparation and service of this food.

After basic rules have been enacted relative to the preparation and service of this food, the most careful attention of the enforcement officer, whether it is the night superintendent of nurses, the assistant director of the hospital or an equally competent person from the dietetic department, should be required.

How Can Scientific and Social Cliques in the Intern Staff be Avoided?

The ideals of the administrators of some hospitals seem to be somewhat low when it comes to the selection of members of the intern staff. It is felt by certain executives in cities in which medical colleges are located that interns should not be accepted from without the environs of the particular municipality. The argument advanced is that after finishing their hospital course, such doctors will practice in the community and hence will be more likely to patronize the hospital by sending patients there. It is argued that the visiting staff of the future must be made up of ex-interns who understand the traditions and the practices of the particular institution better than

those who have interned at other hospitals in the same or nearby cities.

It cannot be gainsaid that there is some truth in this contention. On the other hand, if the hospital is of the highest grade and offers modern efficient service to its community, physicians will desire to avail themselves of its facilities even though they are not ex-members of the intern staff. There is a strong possibility of harmful inbreeding in the conduct of the hospital. Indeed, hospital executives of the greatest experience and of the broadest administrative outlook often are lead to court the application of young physicians from medical schools at greater or lesser distances. It is believed that an intermingling of teachings of the various medical colleges produces a cosmopolitan staff, each member of which brings to its deliberations the practices and beliefs of a varied group of distinguished medical teachers. Such a staff is much more likely to avoid cliquism and political alliances than one made up of the representatives of but two or three schools.

It is a good policy for the hospital to set aside a certain number of intern places to be filled from schools without its immediate professional community. Such a practice tends to stimulate competitive effort on the part of the individual interns themselves and hence to discourage stagnation.

Should Interns Assist at Operations on Nurses?

The forbidding of social intercourse between interns and student nurses is a rather common and somewhat ancient institutional rule. Until recently, perhaps, the greatest percentage of hospitals endeavored to enforce this edict. As a corollary to this rule, interns and even resident physicians are often forbidden to assist or even to be present during an operation on a member of the student body. In rare instances, such a regulation may have its practical applications. The unexpected discovery of an unusual pathologic condition of the pelvis might lead to gossip about the hospital and serve to undermine the morale of the members of the school for nurses.

Yet, frequently, when pupil nurses become ill, they are not afforded the same prompt and efficient study that is given even to ward patients. History writing, unless the hospital is of sufficient size to possess a resident physician whose duty it is to care for ill nurses, is likely to be slighted. Members of the visiting staff called to care for the nurse may be painstaking in their examination and yet the records of these patients are likely to be scanty. If the intern is not permitted to be present at the time of operation, the records of operation and of the after-treatment prescribed may be unduly abbreviated. If it is felt best for the intern not to be present during the course of the surgical treatment of a member of the school for nurses, an associate should certainly be required to set down in fullest measure a description of the pathologic changes discovered and the methods of correction adopted. It is regrettable that when a pupil nurse is admitted to the hospital it cannot be considered that she is no longer a professional person but that she now enjoys and deserves the status of a private patient. It is equally to be regretted that gossip is prone to pervade all grades of the hospital's personnel. If the dignity and ethics of physicians were always of the highest type, if graduate and pupil nurses always spurned gossip, it would perhaps never be necessary for rules to be adopted which prevent the assumption of the fullest professional responsibility by either group, should a member of the intern or nursing staff require treatment.

Greetings and a Tribute

*W*ith pardonable pride, the J. B. Ford Company looks back over a record of more than thirty-three years—a third of a century—of significant service to commerce and industry.

Anticipating the need of industry for scientific sanitation and cleanliness, the Wyandotte Products became the pioneers in the field of modern cleaning standards.

Outstanding in this record of successful accomplishment is the loyalty of our thousands of friends without whom our best efforts would have been of no avail.

Realizing this, we are sincerely glad at this goodwill season of the year to extend to our friends in every field of business activity our most hearty wishes for a

*Merry Christmas
and
A Prosperous New Year*



The J. B. Ford Company, Wyandotte, Michigan

NEWS OF THE MONTH

American Nurses' Association Makes Anniversary Plans

On September 2, 1931, the American Nurses' Association will celebrate its thirty-fifth birthday anniversary. It is making extensive plans now for the observance of this milestone. A membership drive is planned, to begin in early January and to be concluded on the anniversary day. The January issue of the *American Journal of Nursing* will carry full plans for this campaign and there will be also a feature story telling of the growth of the association from this little group of a score of women to a national organization with 86,000 members.

On September 2, 1896, a delegate from each of twelve alumnae associations met at Manhattan Beach, N. Y., with a committee from the American Society of Superintendents of Training Schools—now the National League of Nursing Education—for the purpose of organizing a national association of nurses. This was done. The following year, 1897, the constitution and by-laws prepared by this group were accepted and the national nursing body completed the outline of its organization.

A history of the accomplishments of the association shows nurse practice acts in every state; nursing spread from coast to coast; public health established; nursing education gradually developing until now it has made its bow as university schools, and extraordinary generosity in gifts of money, to the *American Journal of Nursing* in its early days, to the Relief Fund, to the McIsaac and Robb scholarship funds, to the Bordeaux School and the Delano Memorial and to the grading study.

Western Association Sets June 9-12 as Date of Next Meeting

The Western Hospital Association is at present busy making plans for its next annual program and has announced June 9 to 12, 1931, as the dates for the meeting which will be held in the municipal auditorium, Oakland, Calif.

A chart of the space available for the educational exhibit has been prepared for those who find it expedient to make their plans for these meetings well in advance of the date of the meeting.

New Sussex Hospital for Women Honored by Prince's Visit

His Royal Highness Prince George was a distinguished visitor at the New Sussex Hospital for Women and Children on the afternoon of October 29 when he unveiled a commemorative tablet in the new John Howard wards of the hospital.

These wards are the gift of the Sir John Howard Trust

and are for women who are unable out of their own resources to provide equivalent treatment elsewhere. They will consist of single rooms or cubicles to ensure privacy for each patient. These wards are to be fitted up on the most modern lines. The trustees are providing under certain conditions an endowment so that patients whose circumstances are found to be such that they can only afford a moderate fee can have the comfort of these rooms at quite a nominal outlay.

Always a pioneer hospital, the New Sussex is able, with the generous assistance of the Howard trustees, to help, in times of severe illness, those women for whom so little provision is made.

Modern Hospital for Indigents Built at Little Blue, Mo.

Nearly 170 indigent inmates of the Jackson County Home for the Aged and Infirm, Little Blue, Mo., have been transferred to the new \$500,000 hospital on the county farm property. About fifteen county wards at the General Hospital, Kansas City, were included in the transfer. The new hospital will house 284 patients.

South American Medical Center Modeled on U. S. Plan

A great medical center to be built in Montevideo, Uruguay, will be the first of its kind in South America, according to a recent announcement. Work on the building was started on September 15. It is estimated that the construction will cost between \$10,000,000 and \$15,000,000. Approximately \$5,000,000 has already been appropriated by the government so that work may begin on the project, which has the support of all elements in the community—medical, educational, social, governmental and commercial.

It is expected that the new center will be the last word in modern hospitalization from the standpoint of scientific medicine and construction engineering. It will care for, treat and study both the physically and the mentally ill.

In planning the center advice was sought from leaders in the hospital field in the United States. Dr. C. C. Burlingame, chief executive officer of the group that built the Columbia-Presbyterian Medical Center, New York City, spent two months in Uruguay this summer giving the authorities the benefit of his wide experience and expert knowledge in hospital planning and making a number of recommendations as to organization and construction, all of which were adopted by those planning the center.

The whole institution will be organized around the fourfold function of treatment, research, teaching and public education.



Thorn aristocrat of canines, is an unusual collie. He and his mate fetch the anti-toxin horses from the pastures at the Lilly Biological Laboratories. He knows each horse, handles the work perfectly. His services are valuable, his intelligence surprising.

WHEN DOGS GO MAD!

Dogs in health are generally regarded as man's best friends in the animal world. When infected with rabies, they are potentially among man's greatest enemies.

Rabies Vaccine, Lilly

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PROGRESS THROUGH RESEARCH

News of the Month

New Tuberculosis Center Completed in South Carolina

With the completion of one of the most outstanding tuberculosis hospitals in the entire Southeast, and equipped with every modern convenience for such patients, the two story tuberculosis department of the Spartanburg General hospital, on the property of the county farm, opened its doors to the public recently for a week's inspection.

The big tuberculosis center, consisting of six buildings, constructed with English sand brick, and which is fire-resistant throughout, represents an outlay of approximately \$240,970.51, which figure also includes the construction of the negro hospital and the out-patient clinic building.

The new institution will take care of a total of eighty-four patients without unnecessary crowding, and when necessary, and using all of the porches, will accommodate between ninety and ninety-four patients.

Of the amount required to build the unit, the Duke Foundation contributed a total of \$60,000; the Rosenwald Fund contributed \$40,000; the county appropriated \$122,800 by savings effected by the county board from legislative appropriations. The total cost does not include in any instance the cost of furnishings and equipment, or the value of the land.

Dr. J. Moss Beeler is superintendent of the hospital in its entirety.

Aurora Hospital Receives Gift of \$2,445,000

A hospital site valued at \$150,000, a building fund of \$1,000,000 and an endowment fund of \$1,295,000 have been given to the Aurora Hospital Association, Aurora, Ill., by Ira C. Copley who represented the Aurora district in congress for twelve years. The institution will be called the Copley Hospital now, and after the death of Mr. Copley the Copley Memorial Hospital.

The four-story building of the present Aurora Hospital will be incorporated in a six-story building, which will be the first unit of the enlarged institution. Ultimately there will be a children's hospital building, a nurses' home and other buildings.

Public Health Seeks \$750,000 for Expansion Work

The United States Public Health Service is considering plans for expansion of the new National Institute of Health, and it expects to ask Congress at its next session to make available the \$750,000 construction fund authorized at the last session, according to a recent statement by Dr. R. C. Williams, assistant surgeon general.

A force of architects is studying the area around the present buildings of the institute to determine the most suitable locations for new buildings, Doctor Williams said,

and the institute officers are contemplating the addition of two new divisions, one a division of physiology and the other a division of physics. It has been proposed also that the institute develop work in industrial hygiene, and it is possible that this may be done.

The institute hopes later to have a farm somewhere in the country near Washington where animals used in health research may be raised.

The institute now has two buildings situated on a bluff near the Potomac River. These were the buildings used by the hygienic laboratory of the Public Health Service before it was converted into the National Institute of Health.

Suggestions are being considered for the addition of a third story to each of the present two-story buildings, the construction of a third building near them, and of a fourth building just below the bluff, the third story of this building being connected with the first story of the old building.

The new construction would give added space for research workers and permit the expansion of activities into new fields, he said.

The institute at present has three divisions, the division of pharmacology, the division of chemistry and the division of bacteriology and pathology. Under the tentative plan for expansion, it would have five divisions, the industrial hygiene work probably coming under the division of chemistry.

Problems involved in the proposed industrial hygiene work include the handling of industrial poisons, proper heating, lighting and ventilation, and industrial processes in relation to health, Doctor Williams said.

Under the law creating it, the institute is authorized to accept donations to finance research work and to endow fellowships, the fellows being chosen for research on specific health problems. A donation of \$100,000 has been received from the Chemical Foundation for fellowships in chemistry relating to medicine and public health, Doctor Williams said, and the expansion of facilities should result in the institute's being ready to extend its activities when other gifts are received.

After the architectural study has been completed, it is intended to submit a complete plan of expansion to Congress, Doctor Williams said, at the time when construction funds are requested.

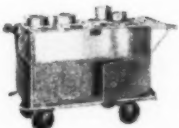
Site Chosen for Jewish Hospital in Montreal, Canada

The Jewish community of Montreal, Canada, after securing pledges of more than \$1,500,000 for the erection and equipment of a community hospital, has chosen a site for the proposed building in the western section of the city at the junction of St. Catherine Boulevard and the Côte de Neige. The hospital site has a southerly frontage of more than 2,000 feet.

Dr. S. S. Goldwater, New York City, is collaborating with the building committee in the formulation of a program for the erection of a building to accommodate 170 in-patients and a generously equipped out-patient department. The committee proposes to employ a Montreal architect to collaborate with Doctor Goldwater in the preparation of plans.



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News of the Month

Dr. Richard C. Cabot Honored Through Educational Fund

A fund of \$25,000 to be known as the Dr. Richard C. Cabot Educational Fund has been given to the trustees of Massachusetts General Hospital, Boston, according to the *Harvard Alumni Bulletin*. The income from the fund will be devoted to an educational program in hospital social service.

The presentation was made by Ida M. Cannon, chief of social service at the hospital, at a recent meeting in the Moseley Memorial Building at the hospital. The fund is the result of gifts of doctors and social workers from all over the country and from other countries. Doctor Cabot presided at the meeting.

Mother Superior Celebrates Her Golden Jubilee

The Rev. Mother Gertrude, Superior, St. Vincent's Hospital, Sioux City, Iowa, celebrated the fiftieth anniversary of her Sisterhood on November 19. The golden jubilee celebration was held in St. Vincent's Hospital, which is one of the institutions under Mother Gertrude's supervision. The others are a home for working girls, St. Benedict's Home for the Aged, the nursing school of St. Vincent's, Trinity College, and St. Monica's Foundling Hospital, all of Sioux City, and St. Benedict's Hospital, Sterling, Colo. All of these institutions are the direct result of Mother Gertrude's vision and energy.

Plans Made for 1931 Negro Health Week

A preliminary conference on the seventeenth annual Negro Health Week, which is to be observed from April 5 to 12, 1931, was held in the offices of the Surgeon General of the Public Health Service recently. Among the subjects discussed at the conference were the results of the 1930 health week observance, the publication of the health week bulletin and other forms of publicity, suggestions relative to the 1931 observance and the future of Negro Health Week.

Illinois Organizes Vigorous Anticancer Program

Describing cancer as a public health problem of the first magnitude, Dr. A. Hall, state health director for Illinois, has announced that five statewide medical and health organizations have formed a cooperative working agreement to initiate and carry forward the most vigorous anticancer program ever attempted in Illinois.

The cooperating organizations include the Illinois De-

partment of Public Health, the educational committee of the Illinois State Medical Society, the Educational Association on Cancer, the Illinois branch of the American Society for the Control of Cancer and the University of Illinois College of Medicine.

The present program calls for the publication of an illustrated booklet for free distribution throughout the state and for the building of a mobile exhibit made up of wax models, actual specimens, pictures and charts that show cancer of accessible parts of the body in all of its recognized stages and forms. It includes likewise a cancer week program when opportunities will be provided for the examination by competent medical talent of persons who wish to take advantage of that service.

The fact that the death rate from cancer in Illinois has gone up 33 per cent since 1918 explains why deep concern over the situation has planted itself in the minds of public health officials and the medical profession. That the actual number of deaths from cancer in Illinois has grown from 5,222 in 1918 to 8,146 in 1929 suggests the magnitude of the problem.

Doctors and Nurses Sought for Government Hospitals

The United States Civil Service Commission states that government hospitals throughout the country, including those under the Veterans' Bureau, the Public Health Service, the Indian Service and other branches, are in need of medical officers and nurses of various grades, and that Veterans' Bureau hospitals have vacancies for psychiatric social workers and junior social workers.

Full information regarding examinations and salaries may be obtained from the United States Civil Service Commission, Washington, D. C., or from the secretary of the United States Civil Service board of examiners at the post office or customhouse in any city.

Complete Information Sought on Convalescent Homes

The committee on convalescent care of the American Conference on Social Work is at present compiling information concerning the extent of convalescent care in the United States. In this connection it has sent questionnaires to all convalescent homes of which it has knowledge, and the material received will be used in the publication of a directory similar to the one published by the Sturgis Fund in 1927. This directory shows that there were convalescent homes in twenty-two states, and that about 50 per cent of the beds were in institutions serving New York City.

The committee believes that there has been an extension of facilities since 1927, and is making this announcement with the hope that any convalescent home that has not received a questionnaire will write at once for one. The address of the committee is 2 East 103rd Street, New York City.

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News of the Month

Fifty-Seven Kansas Hospitals Are Represented at Annual Meeting

FIFTY-SEVEN hospitals in Kansas were represented at the sixteenth annual hospital convention of that state held in Newton, November 8. Following an interesting and well planned program, officers for next year were chosen. They are: president, Dr. T. Restin Heath, Bethany Methodist Hospital, Kansas City; vice-president, Mother Colette, Wichita Hospital, Wichita; secretary and treasurer, Dr. J. T. Axtell, Axtell Christian Hospital, Newton. The next annual convention will be held in Hutchinson.

Outstanding on the program were many comprehensive papers and pithy discussions. Mrs. Beulah Davis, Axtell Christian Hospital, presented a report of the meeting of the American Nurses' Association. Blanche Littleton, Ninnescah Hospital, Pratt, spoke on "The Special Nurse and Her Relation to the Hospital." She spoke especially of the critical attitude of the special nurse who is called to the hospital on private duty regarding the appointments of the hospital, her frequent comparisons of the facilities with which she has to work with those found in other institutions, her criticism of the professional care of the patient and her attitude toward the student nurses.

Mother Colette discussed the present trend in the nursing profession, carefully analyzing nursing problems and nursing facilities. J. A. Dent, Bell Memorial Hospital, Kansas City, outlined the advantages of the central hospital supply room and described a unique method of taking care of the issue and supply procedures in the hospital. Dr. G. W. Jones, Lawrence Hospital, Lawrence, discussed the gastro-intestinal diagnosis from the hospital standpoint. A number of physicians and surgeons attending the meeting took part in the discussion that followed Doctor Jones' paper.

How Staff Can Cooperate

"The Selection and Relation of the Medical Staff to the Hospital" was the title of a paper given by Dr. A. R. Hatcher, Hatcher Hospital, Wellington. He emphasized the responsibility of the appointing authority of the institution in the selection of competent professional men to care for the patient. He pointed out the mutual interest and interdependence of the institution and its medical staff and made a plea for the proper understanding of each institution by the medical men who accepted staff positions.

John E. Lander, financial secretary, Wesley Hospital, Wichita, outlined a system for the collection of hospital accounts which has resulted in a remarkably small loss to the institution for unpaid accounts. Patrons have become so accustomed to the arrangement, he said, that there is no objection on their part to the plan of having someone connected with the patient or the patient himself assume the responsibility of the payment of the hospital account upon the admission of the patient. Since the adoption of the system, there has been a steady increase in income to the hospital and a substantial decrease in the use of urgent measures in the collection of unpaid accounts.

The round table discussion led by Dr. Bert W. Caldwell, executive secretary, American Hospital Association, was participated in by all the delegates to the convention, and many interesting points were brought out.

The president of the association, Dr. T. Restin Heath, conducted the meeting ably, starting each session on time and developing the discussions in a way to prove of the greatest value to the delegates. The association has shown a healthy growth during Doctor Heath's presidency, and the organization this year is undertaking a legislative program which promises to be of large benefit to all Kansas hospitals.

Noted Guest Speakers on Connecticut Program

The Connecticut Hospital Association held its annual meeting at St. Vincent's Hospital, Bridgeport, November 12.

Guest speakers on the morning program included Ida M. Cannon, chief of social service, Massachusetts General Hospital, with the subject, "Social Service in the General Hospital"; Dr. James W. Manary, director of out-patient department, Boston City Hospitals, Boston, with the subject, "Records and Clinic Management at the Boston City Hospital Out-Patient Department"; Dr. Robert Salinger, department of pediatrics, Yale School of Medicine, who spoke on "The Importance and Requirements of Complete Case Histories" and Clara A. Doolittle, record librarian, Waterbury Hospital, Waterbury, who discussed "The Functioning of the Record Room From the Librarian's Viewpoint."

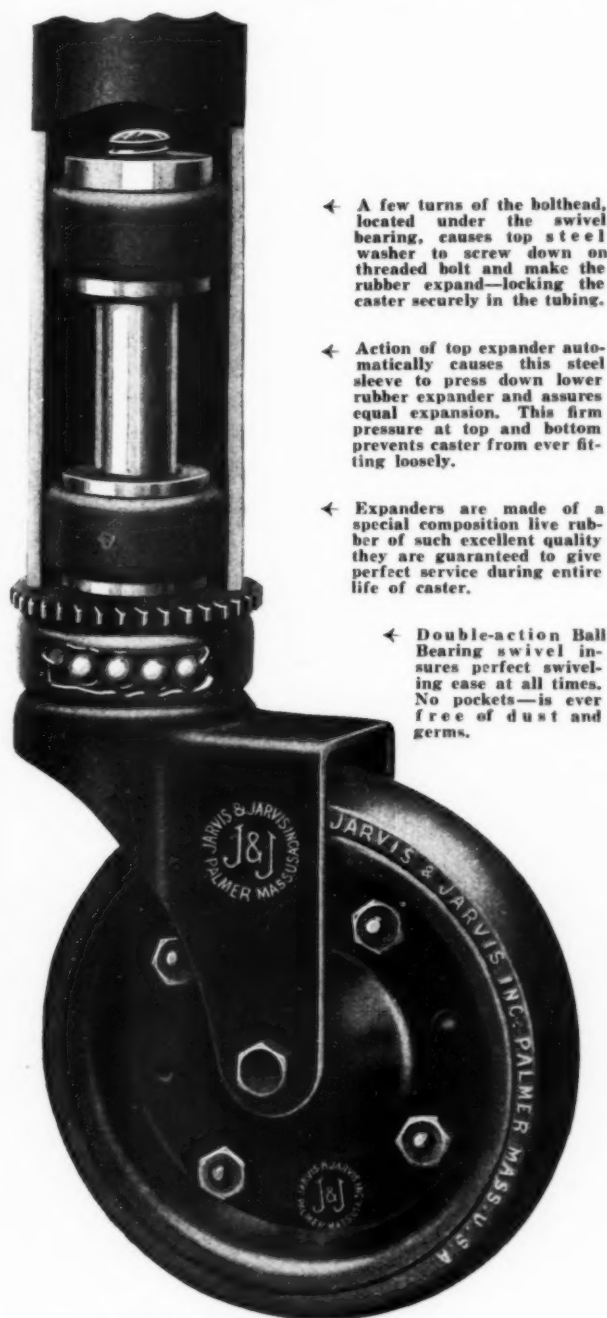
Following the morning session, members and guests were entertained at luncheon by the superintendent of St. Vincent's Hospital.

The afternoon session was devoted to a discussion of the papers read during the morning session and to a round table discussion of hospital and training school problems. An inspection of St. Vincent's Hospital closed the program.

Officers chosen for the coming year are as follows: president, Dr. B. Henry Mason, superintendent, Waterbury Hospital, Waterbury; first vice-president, Evelyn M. Wilson, superintendent, Stamford Hospital, Stamford; second vice-president, Dr. Albert W. Buck, superintendent, New Haven Hospital, New Haven; third vice-president, Sister Elizabeth Mary, St. Francis' Hospital, Hartford; treasurer, Anna M. Griffin, superintendent, Danbury Hospital, Danbury; secretary, Maude E. Traver, directress of nurses, New Britain Hospital, New Britain.

The new directors are Charles F. Strayer, superintendent, Norwalk Hospital, Norwalk, chairman; Dr. Albert W. Buck, superintendent, New Haven Hospital, New Haven, and Frances West, superintendent, Charlotte Hungerford Hospital, Torrington.

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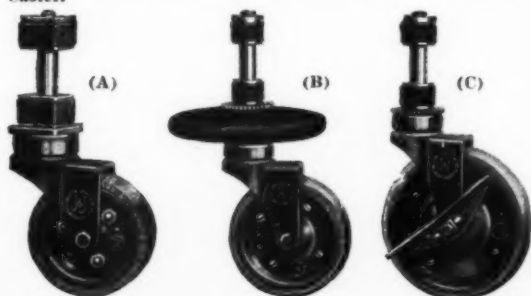
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Personals

DR. WILLARD C. RAPPLEYE, director of studies, Commission on Medical Education, New Haven, Conn., since 1925, has been appointed associate professor of medical economics, Harvard University School of Public Health, for five years beginning February 1.

EDGAR CHARLES HAYHOW has been appointed superintendent of the Paterson General Hospital, Paterson, N. J., succeeding the late Thomas R. Zulich.

DR. ROY W. WRIGHT, senior house surgeon, Charity Hospital, New Orleans, La., has been named assistant superintendent of the hospital in addition to his present duties. DR. ARTHUR VIDRINE is the superintendent of the hospital.

MAGGIE W. DAVIS, formerly director of nurses, Memorial Hospital, Monongahela, Pa., is the new superintendent of Williamson Memorial Hospital, Williamson, W. Va.

SALLY GUMPERT, founder and president, S. Gumpert Company, Inc., Brooklyn, N. Y., died recently. MR. GUMPERT, a trustee of the United Jewish Aid Society, was prominent in welfare work in Brooklyn.

DR. JOSEPH WALDRON MOORE, who has been acting superintendent of Matteawan State Hospital, Beacon, N. Y., has been named chairman of the newly created Parole Board of New York State, succeeding JUDGE IRVING I. GOLDSMITH who has resigned because of ill health. The appointment was made by GOVERNOR ROOSEVELT.

JOHN HATFIELD, for several years assistant superintendent at Pennsylvania Hospital, Philadelphia, has been named superintendent of that institution, succeeding DANIEL D. TEST, who has retired after forty years with that hospital. Mr. Hatfield will assume his new duties on January first.

M. ANNA PARKS has been appointed superintendent, Victory Hospital, Napa, Calif. MRS. PARKS was formerly on the research staff of the Committee on the Cost of Medical Care, Washington, D. C.

CHARLES LEE, for the last two and a half years administrator, New York Ophthalmic Hospital, New York City, has recently been appointed superintendent of Flower Hospital of that city.

DR. SAM L. HUTCHISON, assistant superintendent, Natchez Charity Hospital, Natchez, Miss., has resigned to engage in private practice.

DR. WILLIAM M. DOBSON is the new medical officer in charge of the U. S. Veterans' Hospital, Leeds, Mass., succeeding DR. APPLETON H. PIERCE who was recently transferred to the new U. S. Veterans' Hospital, Coatesville, Pa. DOCTOR DOBSON was originally with the U. S. Veterans' Hospital, Bedford, Mass.

WALTER L. SIMPSON, for many years superintendent of Watts Hospital, Durham, N. C., has accepted the directorship of Grace Hospital, New Haven, Conn.

SARA D. MOORE, superintendent of nurses, Greenville City Hospital, Greenville, S. C., has accepted the superintendency of the Bessemer General Hospital, Bessemer, Ala.

DR. T. D. CUMBERLAND has been appointed superintendent, Ontario Hospital, Kingston, Ont., succeeding DR. EDWARD RYAN, retired.

CAPT. HARRY H. WARFIELD has announced his resignation as superintendent of the Carson C. Peck Memorial Hospital, Brooklyn, N. Y. CAPTAIN WARFIELD has been head of the hospital for the last eleven years. S. D. HUNTER, for a number of years superintendent, Washington Hospital, Washington, Pa., succeeds him.

GERTRUDE STORM has been appointed superintendent, Community Hospital, Kane, Pa.

HELEN L. POTTS is the new superintendent of Woodstock General Hospital, Woodstock, Ont., Canada.

CLARA E. ALLISON recently assumed the duties of superintendent, Greene County Memorial Hospital, Waynesburg, Pa., succeeding ROXANNA GRAY.

DR. HUGH S. GREGORY has recently assumed the superintendency of the Newark State School, Newark, N. Y., which has a capacity of 1,120 hospital beds.

OLIVE MAY MCWILLIAMS, superintendent, Canonsburg General Hospital, Canonsburg, Pa., died suddenly at the hospital, November 5, following a heart attack. Supervisory duties are being carried on at present by ELIZABETH RALSTON, assistant superintendent and director of nurses.

MARY N. GANNON has recently been appointed superintendent, Marshall Browning Hospital, Duquoin, Ill. Miss GANNON came to her present position after more than twenty years with the St. Louis Baptist Hospital, St. Louis, where she served as superintendent of nurses and as anesthetist.

GRACE WAGAMAN, supervisor of nursing training, Good Samaritan Hospital, Sandusky, Ohio, has recently been appointed superintendent of the hospital, succeeding LILLIAN GOWDY, who resigned recently because of ill health. Miss GOWDY has been in charge of the hospital for the last eight years. She is recuperating now at her home in New Jersey.

ROSA A. SAFFEIR is the newly appointed superintendent of Boulevard Sanitarium, Long Island City, N. Y.

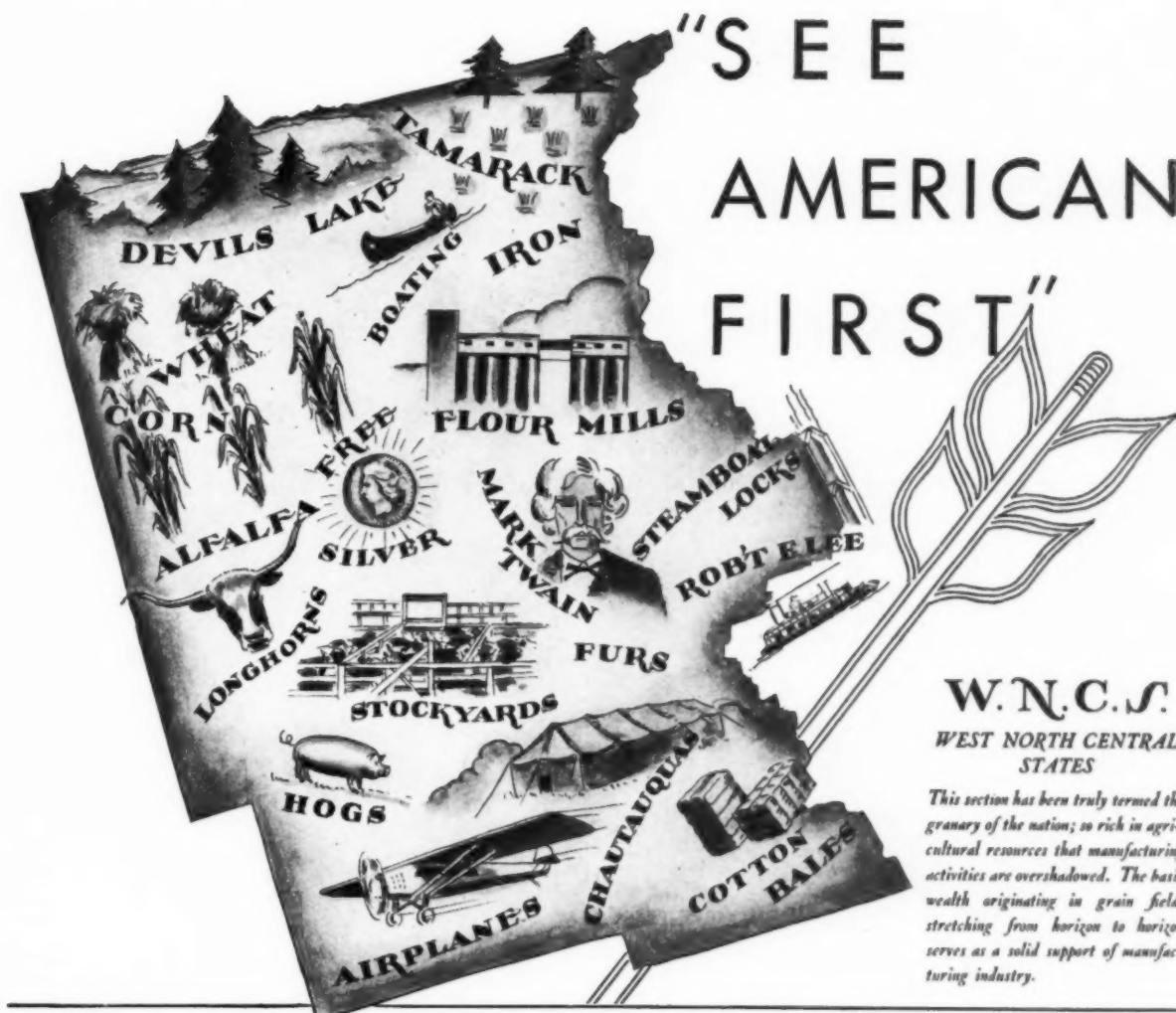
CAPT. W. B. WILSON has recently been named superintendent, Station Hospital, Fort Amador, Balboa, Canal Zone.

MARGARET JOHNSON, R.N., assumed a new position as superintendent of the Beloit Municipal Hospital, Beloit, Wis., on October 1.

MISS A. W. BECKETT was recently appointed superintendent, Baker Sanatorium, Charleston, S. C.

ALLEN J. MCCARTHY, for the past four and a half years business manager, U. S. Veterans' Hospital, Livermore, Calif., and superintendent, Alameda Sanatorium, Alameda, Calif., recently resigned to open a hospital bureau in Oakland.

ALICE I. EDGAR has resigned as superintendent of the Jordan Hospital, Plymouth, Mass.

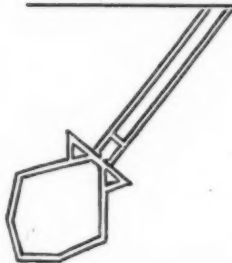


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Director, School of Nursing, Presbyterian Hospital, Chicago

Group Nursing and How It Affects the Welfare of the Patient

A Paper From the American Hospital Association Meeting

By SHIRLEY C. TITUS

Dean, School of Nursing, Vanderbilt University, Nashville, Tenn.

GROUP nursing has been misunderstood by many people of the hospital-nursing world. On the one hand, many people have not understood that group nursing is not a new kind of nursing but is merely an old familiar system of nursing dressed up for the occasion. On the other hand, even a greater number of people have been deceived relative to its apparent simplicity and its purpose and have not grasped the real significance of this movement.

Group nursing is merely divisional specializing, to which have been added one or two embellishments. Divisional specializing is used and has been used probably in every hospital in the country since the special nurse first found her place on the hospital stage. This system is familiar to all, but I shall explain briefly what I mean when I speak of divisional specializing.

Divisional specializing is that system of nursing wherein the time of a special nurse is divided between two or more patients, usually two. Divisional specializing appears from time to time in an informal way on the various ward units of all of our hospitals. For example, Patient A, who has been enjoying the services of a special nurse, may find himself sufficiently far advanced on the road to recovery as no longer to need the exclusive services of a nurse, or it may be that the condition of his purse is such that even though he continues to be very ill, it is imperative that his nursing costs be reduced to the minimum his physical condition will permit. Patient B in the same ward unit finds himself in a position similar to that of Patient A. Then some interested person, the head nurse, the intern or the physician-in-charge, conceives the idea of having A and B share a special nurse between them. A and B are transferred to a two-bed room, to an adjoining private room or to rooms that are near together. One special nurse is discharged and the other special nurse's time and the cost of her services are shared by A and B.

Often, too, divisional specializing is set up when a shortage of registry nurses does not permit the department of nursing to fill all requests for special nurses. It was, of

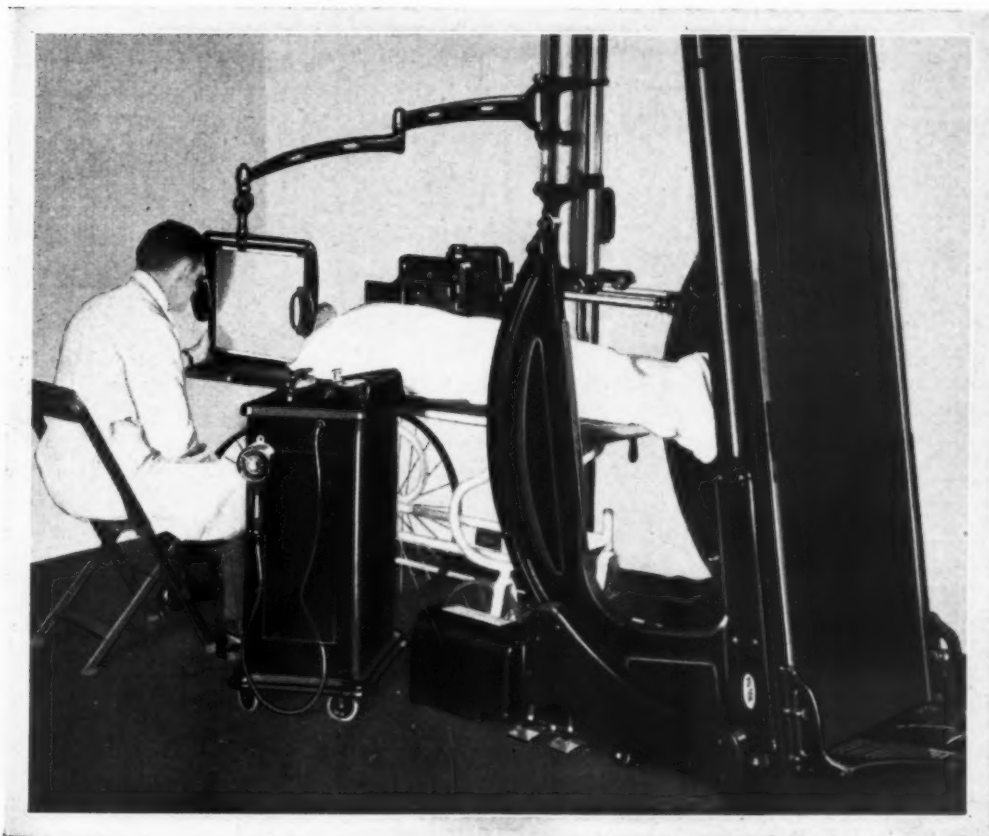
course, this last situation, namely, a shortage of nurses caused by the war, that gave rise to group nursing.

What, then, is group nursing? Group nursing is exactly the same as divisional specializing except for one difference. This difference relates to cost or financial arrangements. In group nursing the hospital sets up a system wherein it employs on a full-time basis a small staff of special nurses. These special nurses are assigned to duty on a specific ward unit where divisional specializing alone is to be practiced. In other words, divisional specializing is provided for in a formal way in this one ward unit. No floor care is offered in this unit and all patients are admitted to this particular unit in order that they may be permitted to enjoy this particular type of nursing, to wit, divisional specializing. As patients are grouped in order that they may receive this service, we have become accustomed to calling this type of nursing group nursing.

How the Nurse's Services Are Sold

Divisional specializing, which is provided for in this formal way in a specific ward unit and which is known as group nursing, costs the patient less than does the divisional specializing that springs up informally on various wards. It costs less because the nurse attached to the group nursing unit is able to sell her services at a lower figure per day than would ordinarily be possible, because guaranteed full-time employment at lower rates affords the nurse as large a return for her services as does seasonal or interrupted employment at higher rates. In other words, because the hospital places those special nurses who are to render service on the group nursing unit, on the hospital's monthly pay roll and thus protects them from the loss of income arising from waits between cases and the other hazards and vicissitudes so common to specializing, these nurses can afford to accept less a day for their services, and the patient profits thereby. The hospital charges back to the patients on the group nursing unit the full cost of the staff of nurses employed in this unit, and no nursing at hospital expense is provided there.

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Group nursing, as you see, is in reality only a variety of special nursing, and the adoption of this system means an encouragement or extension of the special nurse system. Group nursing was ostensibly designed for the purpose of reducing the cost of a particular kind of nursing service to the patient. This type of nursing is, of necessity, used only by a relatively small number of patients. Group nursing does not improve the quality of nursing service received by the average patient nor does it affect him financially one way or the other. In the light of the foregoing facts, it appears that group nursing, although it reduces the cost of nursing to merely a handful of patients, nevertheless because it does reduce nursing costs, should be adopted, for it appears to represent a step in the right direction. However, we must not be misled by its surface appearance, for the problem is neither as simple nor clear-cut as it seems.

I have said that one great misunderstanding relative to group nursing is its apparent simplicity. On the surface it appears simple. Examine it and you will find it will lead you on and into the most basic and perplexing problems of hospital nursing. In fact, I should go so far as to say that if group nursing receives the serious consideration it deserves, it will subject the entire system of hospital nursing to a critical analysis it has long needed. To tug at the root, group nursing, is to find ourselves shaking the tree, hospital nursing. It is of vital importance that the significance of this movement be grasped before the system receives further support or encouragement.

As group nursing is but a particular variety of special nursing and its adoption therefore means a definite extension of the special nurse system, it appears that the logical approach to the problem is in an examination of the special nurse system. Has this system served the patient's best interests? Will an extension of this system, under the form of group nursing, meet a definite nursing need? These are questions we must seriously consider if we are to reach a rational conclusion relative to the merits and shortcomings of group nursing.

Why Special Nursing Was Started

The special nurse system arose out of the need of the very sick patient for constant nursing care and out of the medical necessity of having someone with the patient constantly for the purpose of symptom reporting. In the earlier days, if the patient needed constant nursing care, a member of the hospital nursing personnel was relieved from her general ward duties by the lady superintendent and was assigned to the patient in question. Sometime during this early period the hospital established the policy of making an extra or special charge to the patient if he required the undivided attention of a nurse. Out of this policy of making an extra charge for such nursing services grew our present system of special nursing, that is, the system wherein a graduate nurse who was not an employee of the hospital nursing service was called in from the outside to nurse the patient who needed this constant care. This nurse earned her living, of course, by doing bedside nursing in private homes. Thus, when the bed capacity of a hospital outgrew the size of its nursing personnel to such an extent that the lady superintendent found it difficult to relieve one of her own nurses for the purpose of specializing, the hospital found a way to supplement its nursing personnel without expense to itself.

It is therefore only occasionally that we find to-day any member of the hospital nursing personnel being placed on special duty. All special nurses are called in from the outside.

So much for the origin and for some of the high points

in the development of the special nurse system. We shall now turn our attention to this system as we see it in operation to-day. For the sake of convenience, I shall first discuss this system from the viewpoint of use, and then from the viewpoint of charges.

We have noted that originally the special nurse was used only when the very sick patient needed constant nursing care and attention or when the physician deemed it necessary that a nurse be with him constantly for the purpose of symptom reporting. To-day there are many special nurses on duty in our hospitals for other reasons than this. First, many are there as a result of the great increase of wealth in our country and, second, an equally large number are there because of the poor quality of the general nursing service the hospital is offering its patients.

Poor Floor Nursing Accounts for Specializing

There has been a tremendous increase in the wealth of this country during the past thirty years. The number of persons who might be said to belong to the luxury or near luxury class to-day is many times greater than the number who could be said to belong to this class, say, in 1900. The wealthy person when patronizing the hospital, because of his love of ostentation and display and his insatiable desire for personal service, invariably employs one or more special nurses, whether his physical condition warrants this employment or not.

While the presence of Mr. and Mrs. Rich on the private corridor explains in part the increase in employment of the special nurse in the hospital, nevertheless the second reason, namely, the poor quality of the floor service the average hospital offers its patients accounts for the employment of even a greater number of such nurses.

The deterioration of floor service in hospitals is due partly to the fact that while there has been a great growth of nursing schools in this country in the last twenty-five years, this growth has not kept pace with the growth in the size and number of our hospitals. While there are actually more student nurses on duty in the nursing schools of this country to-day than there were ten years ago, nevertheless the size of the student nurse group has shrunk in proportion to the total number of patients to be nursed.

Another factor that must be considered when discussing the deterioration of floor service, is the increase in the nurse's duties. The advance in the art and science of medicine has slowly but steadily added to the work of the physician. As his duties became both greater in number and more complex in nature, he has perforce relegated to the intern some of his simpler duties. The intern, in turn, has been forced to relegate to the nurse certain of the duties that were formerly his. The nurse of yesterday was called upon to perform only the simplest of nursing duties, such as feeding the patient, bathing him and making him comfortable. I have been told by some of my older colleagues that even up to 1890, the taking of the temperature was considered to be entirely too technical a matter for the nurse to handle.

The organization of the hospital, also, in those days, was too simple to demand much of the nurse's time. Ward housekeeping constituted the major of such duties at that time.

To-day the nurse is called upon to perform many fairly technical procedures, for example, the taking of the blood pressure and the basal pulse and preparing for, assisting with and in some instances actually giving a great number of diagnostic tests. The wide use of more careful technique in the handling of surgical and communicable



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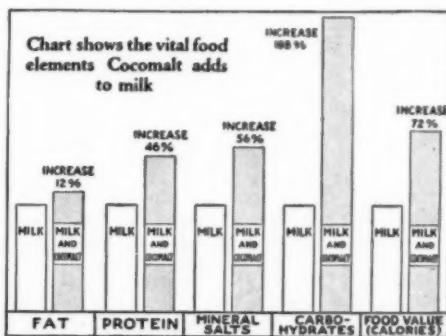
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disease patients, also consumes a greater amount of the nurse's time than it did formerly.

The growing complexities of hospital organization and administration have likewise laid on the shoulders of the nurse a multitude of duties that were conspicuously lacking some twenty years ago. The caring for elaborate equipment, the weekly inventory of this equipment, the maze of requisitions that must be made out, the more exact and detailed keeping of clinical records, the co-operation demanded by all the specialized services, such as x-ray, physiotherapy, social service, dietetics, all make formidable demands on the nurse's time. In short, because of this increase of duties required of the nursing service and the time consuming complexities of these duties, the actual amount of time the nurse has to devote to the actual nursing care of her patient to-day is considerably less than it was formerly. This fact, plus the fact that the size of the student group has shrunk in proportion to the total number of patients to be nursed, has slowly but steadily caused a distinct deterioration in the floor service in the average hospital in this country.

This deterioration in the quality of floor service has definitely encouraged the employment of special nurses. When the floor service of a hospital is of such poor quality that the patient cannot receive reasonably good service, he will, in self-defense, employ a special nurse, even though his physical condition does not justify this expense. When the floor service is poor there is also a definite tendency on the part of certain employees of the hospital to encourage the patient to employ a special nurse, even though his physical condition does not require it, simply because the inability to render proper nursing service with an inadequate personnel frequently becomes so nerve racking that any relief is sought from this strain, even at the financial expense of the patient. In many instances, also, the administrative officers of the hospital definitely encourage the unnecessary employment of special nurses. In fact, in many hospitals it is a common practice deliberately to understaff the private corridors, in order that patients in these units will find it necessary to employ special nurses, thus relieving the hospital of certain nursing costs and enabling it further to conserve its inadequate nursing personnel.

Just what percentage of special nurse employment constitutes an unwarranted and unjust tax on the patient's financial resources no one can with surety state, of course. I believe that the quality of floor service in our hospitals is really poorer and that the number of special nurses employed as a result thereof is really greater than we have realized.

How Special Nurses Are Paid

I shall now turn to the system of charges in relation to special nursing. I have already drawn attention to the fact that at first no charge was made to the patient when he needed the full and undivided attention of a nurse, but that later the hospital began to charge part of the cost of this nurse to the patient. Later, it asked the patient to bear the entire cost. In addition to this, the hospital usually protected itself from losses that might arise from such nursing charges by having the nurse collect her own wages from the patient, that is, the hospital made itself in no way responsible for the collection of the special nurse's salary, although it called her into the institution to render nursing service to the hospital sick. I believe I am correct in saying that the average hospital still assumes no responsibility for the payment of the special nurse.

Eventually, the hospital charged the patient for the

board of the special nurse. Now it is customary, not only to charge the patient for the nurse's board but to add a sufficient amount to the actual food cost so that the hospital makes a clear profit of from 10 to 50 per cent on every charge of this nature.

That there is marked inconsistency if not actual injustice in these charges is obvious. For example, the patient who employs a special nurse actually pays twice for nursing service—he pays the hospital for a certain amount of nursing service when he rents his room or bed (for it is standard practice among hospitals to-day to have the bed or room charge cover the average food, linen and drugs and the intern, housekeeping and nursing services required by the ordinary patient) and he bears the full cost of the special nurse, although by employing her he automatically ceases to receive any nursing care from the hospital. The patient also pays something toward the board of the nurses when he pays his room or bed charge, because all the nurses regularly employed by the hospital are given full maintenance by the hospital and this maintenance cost is met largely through room revenue.

Present System of Charges Not Fair

That hospitals are justified in charging and profiteering on special nurses' board is questionable, to say the least. One also wonders how the hospital, simply because it wishes to protect itself from certain losses arising from the employment of special nurses by "poor pay" patients or "dead-beats," can find justification for its failure to assume full responsibility for the special nurses on duty in its wards, for certainly the hospital, theoretically at least, is not responsible for these nurses nor are these nurses responsible to the hospital, if it does not pay them.

I do not believe the patient's interests were the first consideration when the system of charges in relation to special nurses was established. A portion of these charges may be justified but on a whole they border on the unfair, and it seems that if the hospital is really interested and is sincere in its protestations that it is anxious to reduce the high cost of nursing to its patients, a new standard and a fairer standard of charges relative to special nursing must replace the old. It is obvious that the present system of charges not only permits the hospital to supplement its nursing service without cost to itself but it is equally obvious that this system of charges has encouraged the excessive and unwarranted employment of special nurses.

This special nurse system has also made it possible for the hospital to avoid facing the problem that it should have faced honestly and thoughtfully many years ago, namely, the problem of how far it, the hospital, in accepting the responsibility for the care of the patient obligates itself so to personnel its nursing units as to provide adequate care for each patient. I maintain that not only has the special nurse system forced many patients to meet unwarranted nursing costs, but that this system, because it has given the hospital a loophole through which to slip in its anxiety to postpone the evil day when it would have to face the problem I have just mentioned, has been largely responsible for a serious deterioration of the nursing care offered to the hospital sick in this country.

The floor service of the hospital has been stretched thinner and thinner with the passing of the years. The thinning of this service has been so gradual as to have passed almost unnoticed. It is as if a gram of weight were being added day by day to a person's hand—at first the added weight would pass unnoticed, until eventually the weight would apparently all at once reach crushing proportions. Three factors have contributed to the de-



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terioration of floor service. Two I have already discussed, namely, the failure of the growth of nursing schools to keep pace with hospital bed experience and the increase in the complexities of the nurse's work and in the number of her nonnursing duties. The third factor concerns the nature of nursing itself. Nursing, as I see it, has two aspects—it has a visible aspect and an invisible aspect, if I may speak of it as such. The visible type of nursing in hospitals has gained in quantity and extent during the years; on the other hand, the quality of invisible nursing has definitely deteriorated.

What Is Invisible Nursing?

I shall now attempt to explain what I mean when I speak of the visible and invisible aspects of nursing. The physician knows whether he receives the proper attention and the personal service he judges his official status demands when he makes ward rounds; he knows if his patients are receiving adequate nursing care of the type that can be described as belonging to the "category of medical orders." But does he know or does he concern himself with such matters as how many bed baths a week his patients are getting, whether these patients receive evening care, whether the helpless patient is being properly fed, and does he know or concern himself with that most important of all care, the care known as making the patient comfortable?

The hospital superintendent knows whether the nurse is doing her part relative to hospital housekeeping, whether she is doing her part in regard to maintaining proper clinical records, whether the ward inventory sheets are properly cared for, whether she is rendering to the members of the medical staff the type of service they feel is necessary. But does he know how carefully the patients in his hospital are being nursed? Does he know what is the exact proportion of nurses to patients in his hospital? Has he really carefully studied the question of nurse distribution in his hospital from the viewpoint of the type of hospital, the type of medical service, the quality of service the average patient requires because of his social-economic background, all those factors that influence the ratio of nursing personnel to patient?

I call the carrying out of medical orders, personal service to the medical staff, hospital housekeeping, the keeping of clinical records, requisitions and inventories, and similar services visible nursing. I call the real nursing care of the patient invisible nursing. I call the latter invisible because it is the kind of nursing that the nurse, and the nurse alone, is aware of and is able to evaluate. The patient experiences this nursing, but he seldom is in a position to judge this service for he has, as a rule, no standard to judge by. He does not know what quality of nursing care he is entitled to. He does not know whether he should have a bed bath every day or once a week, for example. It is only when the patient receives the poorest of care that he is likely to complain, unless he is one of the few who have undergone a variety of hospital and nursing experiences. I feel that the hospital superintendent and the medical staff are usually totally unaware of the quality of real nursing care their patients receive, that if the visible nursing meets their ideas as to what it should be, they feel that the nursing service is good. If the medical staff, however, begins to complain of visible nursing, you may be quite sure that the art of nursing is fast disappearing from that hospital, if it has not already met an unhappy end, for a breakdown in nursing service not only begins with nursing of the invisible kind, but the process is usually extensive before a breakdown in visible nursing is noted.

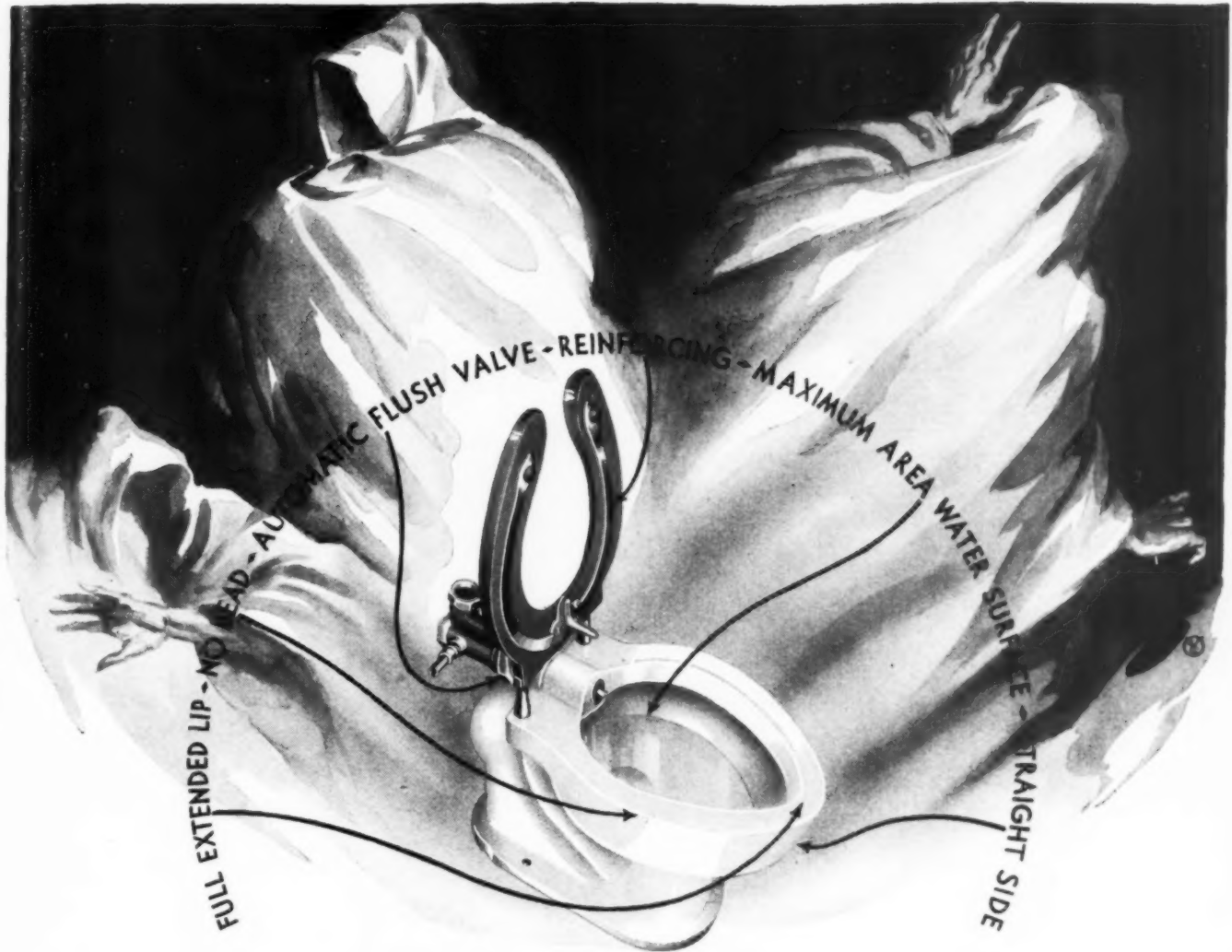
I have said that the shrinkage of the student nurse group in proportion to the total numbers of patients to be nursed and the reduction in the actual clock hours of service the nurse may devote to her actual nursing duties per day have caused floor care to be very poor. It must be remembered that time is to the nurse what the delicate finely adjusted instrument is to the surgeon. Without sufficient time to render a high quality of nursing that belongs to that realm I have described as invisible nursing, the art of nursing becomes as great a travesty as does the art of surgery when the surgeon lacks proper instruments. And yet time, that invaluable asset to the nurse, has each year been reduced moment by moment so that the quality of actual bedside nursing offered to-day in the average American hospital is distinctly inferior to that offered a decade or so ago.

May I add just one word here in regard to complaints of the medical staff relative to nursing service, even though by so doing I digress for a moment from the main subject? Complaints from the medical staff, as I have stated, are based almost exclusively on a breakdown in visible nursing which occurs only after a serious deterioration in nursing of the invisible type. When the members of the medical staff have cause to complain of nursing service, they invariably lay the blame for the breakdown in nursing service at the doors of nursing education, and have a marked tendency to accuse the director of nurses of overeducating the student nurses. That any statement of this sort is made seriously can hardly be credited, with the proportion of about one hour of theory to twelve or twenty hours of practice constituting the customary and accepted standard in our schools of nursing. Of those who are shortsighted enough to really believe that overeducation of the student nurse is responsible for the breakdown in nursing service, I should like to ask three questions: How much less education than is being offered in our nursing schools can we offer and yet expect to attract young women into our nursing schools? How many more new corridors, new floors and new buildings can the hospital open and still have its nursing service rest exclusively on the student nurse and special nurse group? How much more stretching of nursing service can there be before the visible as well as the invisible nursing in a hospital will break down?

Let Us Analyze Our Nursing Service

The moot question of the day is not "How far can we provide for the education of the student nurse and yet render proper nursing care to our patients?" but rather, "How much more bed expansion can we have in this hospital and yet give our patients a semblance of good nursing care with our present system of nursing?" It is bed expansion and the increase in the multiplicity of the nurse's duties and not nursing education that is causing the serious deterioration in hospital nursing in this country. The shortsightedness of hospital boards and hospital directors that permits of further bed expansion without a thoughtful and searching study of the hospital's nursing facilities departs so widely from all sound business principles as to place it in the category of the ridiculous if it were not for the fact that this shortsightedness is fraught with such tragic consequences for the patient.

The point I wish to make is this: Before we go further with this attempt to extend the special nurse system under the form of group nursing, should not the hospital-nursing world first take stock of the quality of nursing service offered by the American hospital? Should we not, in fact, ask ourselves that momentous and all important question—How far does the hospital, in accepting the responsibility



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for the care of its patients, obligate itself so to personnel its nursing units as to provide adequate nursing care for each patient? Should we not ask ourselves if the special nurse system as we are now using it really serves the patient's best interests? Are the charges relative to special nurses really just and fair? Has the quality of nursing service rendered the hospital sick kept pace with the refinements in medical care that have been made in the last twenty years? What constitutes good floor service, floor service every patient should have? How shall we find the nurses for this service and how are we going to meet the cost? How much more bed expansion may we have in this country and yet expect the student nurse group and the special nurse group to meet the nursing needs of our patients?

Evaluating Group Nursing

I feel that hospitals, if they are sincere in their efforts to serve their patients' best interests, should have many time studies and cost analyses of nursing made and should study carefully all those factors that influence personnel load. These studies and analyses should be done under the supervision of experts and should be made in many hospitals so that the data thus accumulated would be of real value. Such studies and analyses would lead to a functional as well as a financial adjustment of nursing, a wiser use of the nurse, a fairer system of charges for nursing service, and to the supplementing of the student nurse group by a staff of general duty nurses. The nursing budget would cease to be a matter of serious controversy and would represent reliable, dependable figures arrived at in a rational manner. Such studies and analyses would also establish a proper evaluation of group nursing.

As matters now stand, an inquiry into the subject of group nursing makes one wonder if group nursing does not represent merely another attempt on the part of the hospital to saddle the patient with nursing costs the hospital itself should meet, if this is not merely one more attempt to bolster up an inadequate nursing service.

Inquiry into group nursing indeed raises many questions. The following constitute the most pertinent. Can divisional specializing have met so great or so real a need in the hospital if after all these years it is still used on such a limited scale? If it has been used so little, why are we now going to considerable trouble to provide for it in a formal way? If the group nursing unit must be well filled at all times if the hospital is not to suffer severe financial loss, will there not be a tendency on the part of the hospital unduly to encourage the patient to occupy a bed in this unit, and to remain there longer than his physical condition warrants? Is the nursing care in the group nursing unit, where fifty per cent of the nurse's time is given over to another patient, so much better than is the quality of floor care, granted the floor care is good? If the patient is so ill as really to require the undivided services of a nurse, but his financial status is such that he cannot afford this special nurse, and he is placed in a group nursing unit as a compromise measure, can one feel that this compromise represents a proper handling of the situation? If the reduction in the cost of divisional specializing, when it is formally provided for and is known as group nursing, is due to the fact that the hospital employs on a full-time basis a small staff of special nurses who are to render this particular type of nursing care, why does not the hospital operate the same system in relation to special nursing, and thus reduce the cost of the same to the patient? Would not such a reduction affect more patients? These are only a few of the

many questions that make one feel somewhat skeptical about the group nursing movement.

It is obvious that group nursing demands careful thought and consideration. Economic pressure has caused the hospital to depart from what might be considered its proper responsibilities for the nursing care of its patients, and has caused it also to fail to meet in full its proper responsibilities relative to nursing costs. The situation is one that demands a certain degree of tolerance and understanding, but economic pressure cannot justify such action over too long a period. The hospital must remember that nursing care constitutes one of the most important and essential services it offers to the sick, and any deterioration in the quantity or quality of nursing care the patient receives will without doubt work direct injury not only on the patient but on the hospital as well. If the basic cause of the deterioration of hospital nursing is economic, surely a solution to the problem cannot be difficult to find in a country as rich as ours.

Regardless of all the dangers with which group nursing seems fraught in regard to the general welfare of our patients, I feel that it will have served a great purpose if it brings about a searching examination and analysis of hospital nursing and if it brings to the hospital boards, hospital directors and medical staffs of this country a realization of a fact that hospital nurses know only too well, namely, that the floor service is too frequently overloaded to a point where the art of nursing can no longer be practiced. If group nursing will accomplish that, notwithstanding all the skepticism with which we may now view it, we may yet declare it good.

"How Westchester Cares" Is More Than an Annual Report

"How Westchester Cares" is the name of an attractively written and illustrated booklet which represents the annual report of the commissioner of public welfare, Westchester County, New York. In its pages is described the way in which Westchester cares for dependent children, for the sick, for the short term offenders and for the aged.

Mentioned especially is Grasslands Hospital, Valhalla, N. Y. Space is devoted to the various units of the hospital, such as the new psychiatric hospital, the new tuberculosis unit and Sunshine Cottage for tuberculous children. With the opening of these special units more facilities will be available for chronic patients, 210 of whom are at present on the waiting lists. Special services at the hospital are mentioned as follows: Social service department; the tuberculosis after care bureau; chaplain service; recreation; occupational therapy; children's school; Westchester School of Nursing; out-patient clinics.

In submitting the report to the citizens of the county, George J. Werner, commissioner of public welfare, wrote the following letter, which is reproduced in the report: "Westchester is often called the most beautiful county in the United States. Your department of public welfare is bending every effort to make it also the most healthful, the safest and the freest from crime and misery. This department is dedicated to the proposition that every child is entitled to a full opportunity to develop into a normal, self-supporting citizen. It is dedicated to the belief that every sick person should have the benefits of modern medicine regardless of ability to pay; that the public is best protected from crime if short term prisoners and first offenders are given humane treatment and an opportunity to make good."

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Varying the Christmas Menu for Therapeutic Diets

By SISTER VICTOR

Dietitian, St. Mary's Hospital, Rochester, Minn.

THE season of the Christ Child's birth should be a time of universal joy and good will. Every effort should be made to surround with happiness and good cheer those people who cannot spend Christmas at home within the family circle but must remain in the hospital. The hospital dietitian can contribute largely to the holiday spirit by attractive tray service.

The Christmas menu should contain as many of the traditional holiday dishes as possible. A menu may be

planned for patients on general diet and from it all therapeutic diets can be adapted.

CHRISTMAS DAY MENU

Dinner

Cocktail—Grapes in Orange Juice
Roast Turkey Giblet Stuffing
Baked Sweet Potatoes Asparagus Tips
Perfection Salad with Mayonnaise
Cranberry Ice Christmas Cookies
Salted Nuts Mints

Supper or Lunch

Oyster Stew Salted Crackers
Holly Wreath Salad Cheese Sandwiches
Fruit Cake

This general house diet, as well as the following therapeutic diets, includes simply prepared dishes for which the individual dietitian usually has her own recipes. A few descriptive notes of the less usual dishes may be helpful: the holly wreath salad consists of two pear halves in a lettuce nest. On each half is placed a spoonful of stiff mayonnaise to which have been added finely chopped parsley and celery. The mayonnaise is covered with whipped cream on which is formed a holly wreath of finely chopped green cherries or green cocoanut with dots of red cherries. The cheese sandwiches may be garnished with slices of stuffed olive.

MENU FOR THE DIABETIC DIET

Dinner

Cocktail—Grapes in Orange Juice
Roast Turkey Asparagus Tips
Perfection Salad with Mayonnaise
Cranberry Ice Salted Nuts

Supper

Baked Squash Cheese Sandwich
Holly Wreath Salad

The menu can be easily adapted to individual diet calculations. Green grapes canned without sugar may be used in making the cocktail and pears canned without sugar for the salad. The perfection salad is the same as that on the general menu except that the ingredients are

The Dietetic Staff of Saint Mary's Hospital

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- Greetings -

We hope that this diet planned for you will help you to have

A Merry Christmas

DINNER MENU

Bouillon
Celery Hearts Cranberries
Turkey
Asparagus Tips
Pear and Nut Salad
Pumpkin Custard Whipped Cream
Coffee

Carbohydrate 75 Protein 53 Fat 175

BREAKFAST

| | Gram |
|-----------|------|
| 10% Fruit | 100 |
| Egg | 0 |
| Baron | 15 |
| Butter | 10 |
| Bread | 20 |
| Cream 20% | 15 |
| Cereal | 0 |
| Muffin | 0 |

PEAR AND NUT SALAD

Lettuce-17 gm.
Pear-60 gm.
(canned without sugar)
Walnuts-10 gm.
Mayonnaise 25 gm.

DINNER

| | Gram |
|-----------------|------|
| Celery Hearts | 50 |
| Cranberries | 30 |
| Turkey | 65 |
| Asparagus Tips | 100 |
| Pear, Nut Salad | — |
| Pumpkin Custard | — |
| Mayonnaise | — |
| Butter | 20 |
| Bread | 20 |
| Cream 20% | 60 |

SUPPER

| | Gram |
|--------------|------|
| 5% Vegetable | 200 |
| 5% Fruit | 100 |
| Egg | 0 |
| Milk | 0 |
| Mayonnaise | 25 |
| Butter | 20 |
| Bread | 0 |
| Muffin | 0 |
| Cream 20% | 65 |

PUMPKIN CUSTARD

Milk-100 gm.
Egg-1/2
Pumpkin-25 gm.
Vanilla 2 drops
Whipped Cream-10 gm.
Saccharine 1/4 grain



Former diabetic patients are sent this Christmas greeting.

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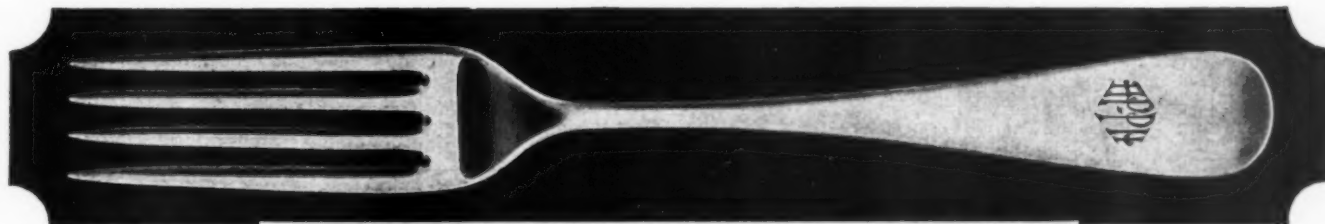
Hot Milk



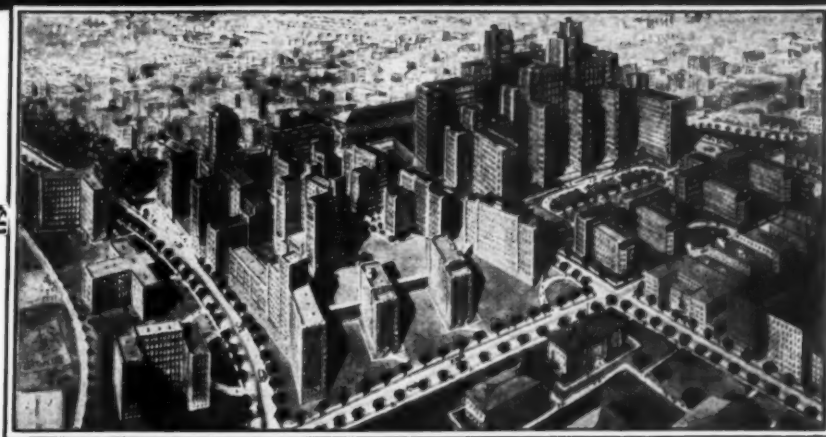
Sherbet Cup



Cream



Above—Fork from flatware used in the Harkness Pavilion and Sloane Hospital.



At left—Columbia-Presbyterian Medical Center, New York City — the Harkness Pavilion and Sloane Hospital units of which are Gorham equipped.

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HOSPITAL and HOTEL DIVISION

NEW YORK

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weighed and saccharine used in place of sugar. The cranberry ice is also sweetened with saccharine.

This menu may be readily adapted to ketogenic diets.

MENU FOR REDUCTION DIET

Dinner

Cocktail—Grapes in Orange Juice

Roast Turkey Asparagus Tips
Perfection Salad with Mayonnaise
Cranberry Ice

Grapes and pears canned without sugar may be used for the cocktail and for the supper salad. Mineral oil mayonnaise dressing may be used on the salads. The whipped cream should be omitted from the holly wreath salad. This menu must necessarily be modified according to the amount of protein and the number of calories prescribed.

MENU FOR THE LOW PROTEIN DIET

Dinner

Cocktail—Grapes in Orange Juice

Roast Turkey

Baked Sweet Potato Asparagus Tips
Perfection Salad with Mayonnaise
Cranberry Ice Christmas Cookies

Mints

Supper

Potatoes in Cream Sauce Baked Squash
Bread and Butter Sandwiches
Holly Wreath Salad

Since most low protein diets allow meat at least once a day, the dinner may be the same as the general diet with the omission of the giblet dressing and nuts. In some instances the oyster stew would be allowed for supper, in other cases it would be omitted. The supper salad could be the same as for the general diet. Bread and butter sandwiches can be substituted for the cheese sandwiches.

MENU FOR THE BLAND DIET

Dinner

Cream of Pea Soup

Roast Turkey Baked Sweet Potato
Asparagus Purée in Toasted Bread Cases
Vanilla Ice Cream in Santa Claus Molds

Supper

Oyster Stew Saltines
Potatoes in Cream Sauce
Angel Food Delight

A bland diet must necessarily vary more from the general than any other diet, especially with respect to consistency.

The foregoing menu can be modified to meet the requirements of patients with gastric and duodenal ulcer, chronic ulcerative colitis and similar disturbances. When meat is not allowed, a foamy omelet may be substituted. Both desserts must be different from those on the general diet.

Angel food delight is prepared as follows: Place an angel food cup cake on the center of the plate. Encircle it with a mixture of banana, cooked pear and cooked peach, cut in even-sized pieces. Put a spoonful of whipped cream on the cake and top it with a bit of bright red jelly.

Favors enhance the attractiveness of trays. A nut cup of festive design might be placed on the dinner tray. A decorated menu card could be added. The student nurses enjoy printing and embellishing menu cards. The favor on the supper tray might be a Christmas tree, a Santa Claus, or a poinsettia.

While the dietetic department is planning to make the hospital patient happy, it is well for it to remember also the former patients who have to follow therapeutic diets. The season's greetings with a menu planned to fit the individual diet prescription, sent to each patient, will prove an acceptable remembrance. Such a greeting is illustrated here.

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from the
United States Gypsum Company

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in texture, resembles Travertine stone. This permits a great variety of beautiful decorative designs which will add to the attractiveness of your institution.

We invite you to call in a USG sound control expert to study the noise conditions in your institution. He will advise you impartially and without obligation how they can best be corrected. If you accept his recommendations,

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ACOUSTONE

OUT-PATIENT SERVICE

Conducted by MICHAEL M. DAVIS, Ph.D.,
Director for Medical Services, Julius Rosenwald Fund, Chicago

The Dental Clinic—An Asset to Out-Patient Service

By MARION HAYES

Clinic Executive, Dental Health Service and

CLARE TERWILLIGER

Executive Secretary, Committee on Community Dental Service, New York Tuberculosis and Health Association, New York City

DENTAL clinics are becoming increasingly common in out-patient departments of hospitals and a brief formulation of desirable policies and standards may be of help to hospital administrators at this time. The management of a dental clinic is a highly specialized activity which is divided into three distinct phases: (1) types of patients to be taken and types of work to be done, (2) standards of technical supervision, and (3) business administration.

In order to justify its existence a dental clinic should ensure a uniformly high quality of service. The operators responsible for this high quality of service can accomplish the best results only when the administration runs smoothly. Before starting such a clinic it is necessary to fix the status of the dental service in relation to the hospital organization and also to decide upon certain definite policies.

In 1925 a committee of dentists, brought together under the auspices of the Committee on Dispensary Development of the United Hospital Fund in New York City, sent out questionnaires regarding the organization and management of dental clinics to representative hospitals throughout the country. As a result of their study of the different phases of dental clinic policy and management they prepared tentative standards for dental clinics. These standards were printed in the *Journal of the American Dental Association*¹ and were widely distributed. The standards are divided into two sections—policy and technique. Excerpts from this report relating to essential factors in the establishment of a dental clinic are quoted in the following paragraphs.

"1. A definite policy should be adopted before instituting dental service, regardless of the size of the institution.

"2. Dental service is regarded as an essential part of the work of a general hospital and should be organized as one of the professional departments of the hospital.

¹"Dental Service in Hospitals and Clinics—Tentative Standards" prepared by a professional committee under the auspices of the Committee on Dispensary Development of the United Hospital Fund, *Jour. Am. Dental Assn.*, November, 1925.

"3. The dental service should be under the direction of a chief, who should rank with the chief or chiefs of other professional departments or services of the hospital, such as medicine or surgery.

"4. The dental service should be represented on the general medical board of the hospital, in a manner conformable to that in which other major services of the hospital, such as medicine and surgery, are represented thereon. The general medical board is understood to be a body that should have supervision over the general professional policies and standards of the institution.

"5. The dental policies and standards for the hospital should be under the professional control of the dental service, subject to final decision of the medical board.

"6. The dental staffs of the hospital and its out-patient department should constitute one organization. The chief of the dental service should have direct supervision over the out-patient department.

"7. Regular staff conferences of the dental service should be held for the discussion of ward and clinic cases and dental staff members should participate in the general clinics or conferences.

"8. The dental service should participate in the consultation facilities that are maintained among the various services of the institution. Professional responsibility for each patient should at any given time devolve on one service, those services to which the patient may be referred for consultation reporting to the service that has assumed responsibility.

"9. The appointment of dental interns is desirable. They should be assigned definite duties in the hospital and in the out-patient department under the supervision of the visiting staff of the dental service.

"10. Surface cleanings, which are so important in maintaining a healthy condition in the mouth, should be done by oral hygienists working under the supervision of the dental staff.

"11. A small institution that limits its dental work to a consultation service only should have the consultants



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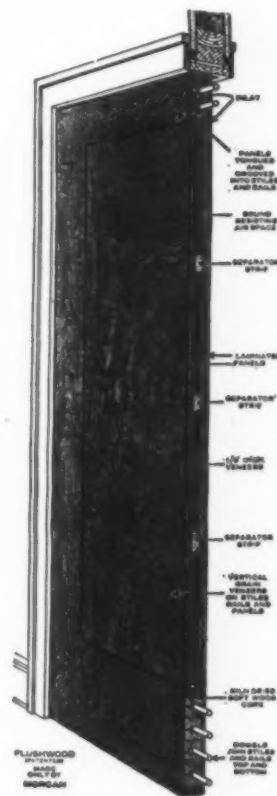
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attend at regular intervals instead of when called. It is desirable that such institutions employ a hygienist to do surface cleanings and to chart mouths. The appointment of a dental intern would also be advantageous, if financially practicable."

The following quotation from the report deals with the suggested policy as to types and methods of work.

"The hospital is for the care of the sick in bed; the hospital out-patient department exists for the purpose of caring for the ambulatory sick. Their obligation to the patient in assuming responsibility for hospital care is both diagnostic and curative. Therefore in such institutions the types of work recommended for adults, given below, are listed in the order of their importance in clearing up systematic disease. The reparative and the restorative work are important in that a proper chewing surface is necessary to digestion, but these types of service can be obtained at the office of a dentist or at a dental college after the hospital care is completed: (1) prophylaxis, (2) diagnosis, including roentgen ray examination, (3) removal of unsavable teeth, (4) oral surgery, (5) treatment of pyorrhea, (6) reparative work and (7) restorative work. The work for children should be done in the following order: (1) prophylaxis, (2) diagnosis, including roentgen ray examination, (3) removal of unsavable teeth, (4) prophylactic fillings for the preservation of the first permanent molar or any other permanent teeth and (5) silver nitrate treatment for decaying deciduous teeth."

The dental committee recommended a policy in regard to a choice of patients. Such a policy is necessitated by the fact that dental clinics are always popular and likely to be overrun with patients. Unless it is understood that the patients already under the care of the hospital must be served first, a clinic is likely to find its chairs filled with patients who come to the out-patient department of the hospital for dental work only, while the physicians in other clinics of the out-patient department or in unattached clinics, who need the cooperation of the dental service, become discouraged and do not refer their patients. The committee recommended that patients should be accepted in the following order: first, emergency cases (it is always understood in all clinics that emergency cases take precedence); second, patients (children and adults) who have come to the hospital or to the out-patient department for conditions other than dental in which dental work will serve as an aid in therapeutic treatment of general medical and surgical conditions or as a preventive measure; third, hospital personnel.

How to Get the Best Service

A routine procedure to be followed in all types of work facilitates the service. In the majority of cases a job defined is a job well done. Such a procedure has been worked out and tried.¹ The intern just out of college or the more experienced man new to the service will go ahead with more assurance if it is understood that a certain anesthetic is to be used or that some definite amalgam technique has been adopted by the staff. Definite procedure is an aid to training, a guide in supervision and a guarantee of a uniformly high quality of service.

The elements of organization and policy that have been quoted may require some modification to fit local needs, but they will serve as a basis for discussion of clinic plans by the dental chief and his assistants or the advisory board, as the case may be.

It is understood, of course, that the dental operators of

the clinic will practice dentistry and will record their operations on the patient's chart. The administrator is responsible for everything else. These duties include care of the clinic, service to the operators, arranging appointments, collection of fees, care of records, purchasing and the coordinating of the out-patient and in-patient services. The division of duties will depend upon the size of the clinic. Frequently the attendants are obliged to work in a space that is not properly adapted to clinic work. Because of unfavorable conditions they may do poor work, when under more favorable conditions they would prove excellent clinic administrators. The things to be considered in planning for the comfort of the patients, operators and personnel are the type of floor covering, the condition of the equipment, prompt repairs, a full complement of supplies and instruments and proper waiting space and place for the patients' wraps. Floor covering is not only important from the standpoint of relieving excessive fatigue but also from an economic standpoint. Instruments that drop on stone or tile floors break easily and this means a large repair or replacement bill. The same types of floors are also fatiguing for those who are serving the operators and must do a great deal of walking.

The Value of Cleanliness

Promptness of repairs is important to the efficiency of the clinic. Makeshifts due to lack of repair are apt to cause slipshod work. The failure to replace instruments and to have on hand the necessary supplies will naturally have the same effect as the failure to make repairs.

If there is a well managed appointment system, the waiting room for a clinic need not be large, but it should be comfortable so that the anxiety of a patient anticipating a possibly painful experience will not be increased.

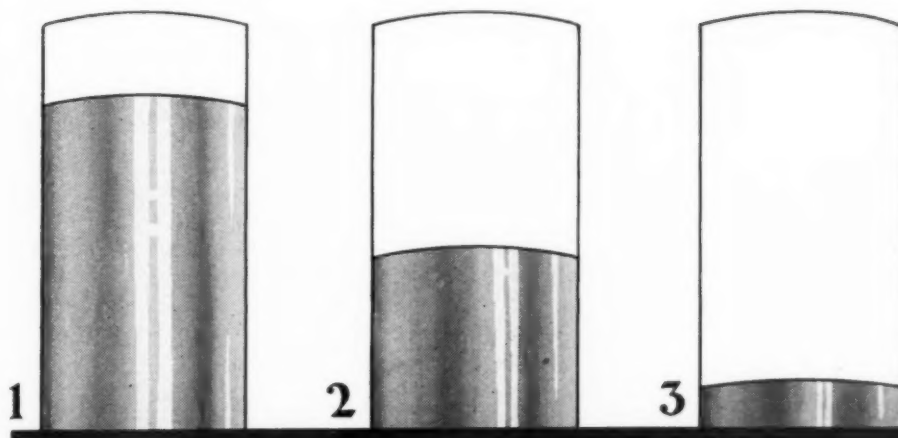
Cleanliness produces an important effect, the value of which cannot be measured. A thorough daily cleaning of the clinic room is necessary. Placing paper lining or bags in the waste cans is a small but important item. A clean head rest cover should be used for each patient. A kind made of paper can be procured at low cost. Napkin clips with metal chains can be boiled and therefore are preferable to those made of tape. One of the most important items of cleanliness is the neatness of the personnel. The clean and crisp appearance of the uniform is not only pleasing to the patient but is important to the morale of the wearer.

The service to the operators includes sterilizing the instruments, assisting at the chair and the developing of x-ray films. In some clinics a hygienist or an attendant is specially trained to take the x-ray pictures. If a nurse is not serving in the clinic, it is important that the assistant be given an opportunity to observe the hospital's method of sterilizing instruments in order that she may know how to take care of the instruments with cutting edges and may understand the difference between soap and water cleanliness and sterilization, so that she will be equally effective in assisting the operator doing either operative dentistry or oral surgery.

The worker who is assisting at the chair should be on hand when needed. She should become accustomed to instrumentation in different cases so that she knows what to have ready. She should have a thorough understanding of the mixing of amalgam and when the patient takes a seat in the chair she should have ready all the data for the case including the x-rays, so that it will not be necessary to interrupt the work while she goes to obtain forgotten records.

If the developing of the x-ray films is taken care of by a hospital x-ray department, the clinic attendant is relieved

¹"Standard Procedure for Treatment of Dental Clinic Patients," Committee on Community Dental Service of the New York Tuberculosis and Health Association, March, 1930.



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of that responsibility. If the attendant, however, is obliged to develop the films, careful attention should be given to her training so that the patient's work will not be unnecessarily delayed because of poor developing requiring the taking of a new set of pictures.

Appointments are important to the success of a dental clinic. A crowded waiting room creates a hurried and unsettled feeling in the minds of the operators and the personnel. Patients who are obliged to wait a long time are apt to forego the completion of their work rather than go through the unpleasant experience again. Clinics without appointment systems are apt to have their files filled with record cards of one-visit cases. At the time of the patient's first visit the attendant can learn from the operator the approximate number of visits that will be required to finish the work. Appointments can be made accordingly so that the work will be finished in a reasonable time.

How Appointments Are Recorded

The case load should be watched so that appointments are never more than a week apart. If an appointment is broken, a second appointment date should be mailed to the patient. A definite policy about discontinuing treatment after a certain number of broken appointments is essential so that the time of the clinic will not be wasted, and so that some other person willing to keep appointments and in need of service will benefit by that time. Each clinic should have an appointment card with a place for the patient's name, the date of the next appointment and some statement about the importance of keeping appointments.

In the clinics where fees are collected a social service problem exists. There should be a definite understanding that patients are eligible to the clinic if their family income per capita does not exceed a certain amount. This amount will vary in different places and will have to be fixed according to the cost of living in the particular community. It may be as low as \$5 per person per week, and it may range as high as \$12 or \$15. The collection of fees always has to be handled tactfully, and the policy of requiring a small payment at each visit always works out best with limited incomes.

In order that there may be no misunderstanding about the operation performed for the patient, the procedure should always be recorded by the dentist doing the work. In all other respects the care of the records is the administrator's responsibility. If the records are filed in the clinic room, the attendant should take the patient's record from the file and have it ready when the operator begins work. If the records are filed centrally, the clinic attendant should make out a requisition at the beginning of each clinic session for the record cards of all patients for whom appointments have been made and should see that these records are properly filled out by the dentist and returned to the central file.

It should be decided by the clinic or hospital authorities what information they want to obtain regularly about dental clinic patients. If there is a state or local licensing body for clinics, the figures that they require will have to be taken into consideration. Tabulating sheets which will give the desired information to any group requiring statistics should be kept daily and the daily totals should be recorded on a monthly sheet. The monthly totals should be entered on an annual sheet so that a report of the work by the year, month or any other fraction of the year will be available at any time.

In the small clinic the clinic attendant must do the purchasing. In the large hospital, however, the purchasing

department will assume that responsibility and the clinic attendant will only requisition supplies as they are needed. A great saving can be effected by buying in bulk those things that require frequent replacement, such as burs and explorers. In any case, whether the clinic is large or small, a hand-to-mouth existence should be avoided, because there is always the danger of lacking something important for the completion of a case.

In a hospital where both in and out-patients are cared for in the same clinic, some member of the clinic personnel should be made responsible for the management of appointments. In many cases it is important that the in-patient's dental work be completed rapidly in order to facilitate that patient's hospital care. If the hospital has dental interns who make rounds on the wards and spend time in the clinic, the same executive should arrange definite schedules in order that all the necessary work may be accomplished, just as the superintendent of nurses finds it necessary to make out schedules for the nurses.

In planning a dental department for a hospital, the space should be laid out in such a way that expansion of the service will be possible as it grows. A 100-bed hospital has need of four dental chairs and should start with two, one for the hygienist and one for the intern or visiting dentist.

There has been a gradually increasing interest in dental service for hospital patients in the last ten years. Eight years ago, in New York City there were six hospitals employing dental interns, now there are twenty-one. It has been found that clearing up focal infection in the mouth is frequently the means of effecting a more rapid cure, thereby shortening the patient's stay in the institution.

A well managed dental service functioning in cooperation with all the departments of a hospital is an asset whose limits have never been thoroughly explored.

Library Service for Patients in British Hospitals

During the last ten years there have been distributed in Great Britain 3,491,704 books to general hospitals, sanatoriums, mental institutions, cottage hospitals and convalescent homes and some British hospitals overseas, according to the *London Times Educational Supplement*. These books were distributed by the British Red Cross and Order of St. John Hospital Library which supplied 1,617 institutions with books last year at an expenditure of £2,194.

These facts were brought out at the recent conference of the British Library Association, which passed a resolution to the effect that while it appreciated the work of the British Red Cross and the Order of St. John Hospital Library, it considered that the provision of books to hospitals was a public responsibility.

The conference urged upon hospital authorities the therapeutic and social importance of providing properly chosen libraries for patients and the necessity for the control of such libraries by trained professional librarians; it called the attention of public library authorities to that section of the community within their territories which nevertheless was as yet unprovided with any adequate library service; it suggested that members of their staffs should be detailed for this work and that a delivery station should be established for the service of noninfectious wards in each hospital in the authority's boundary or that students' books should be borrowable from the public library.



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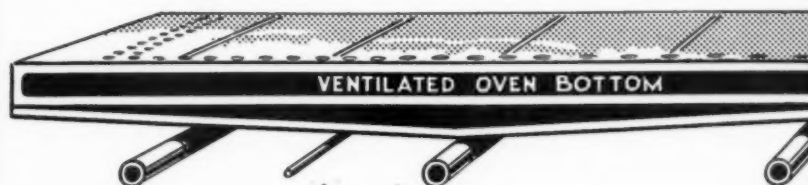
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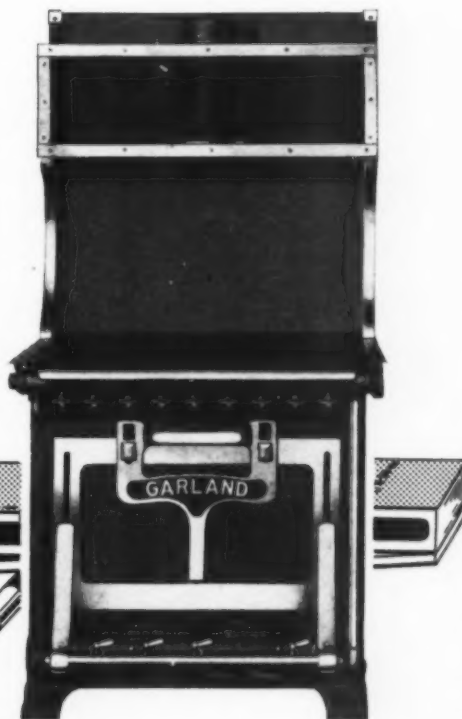
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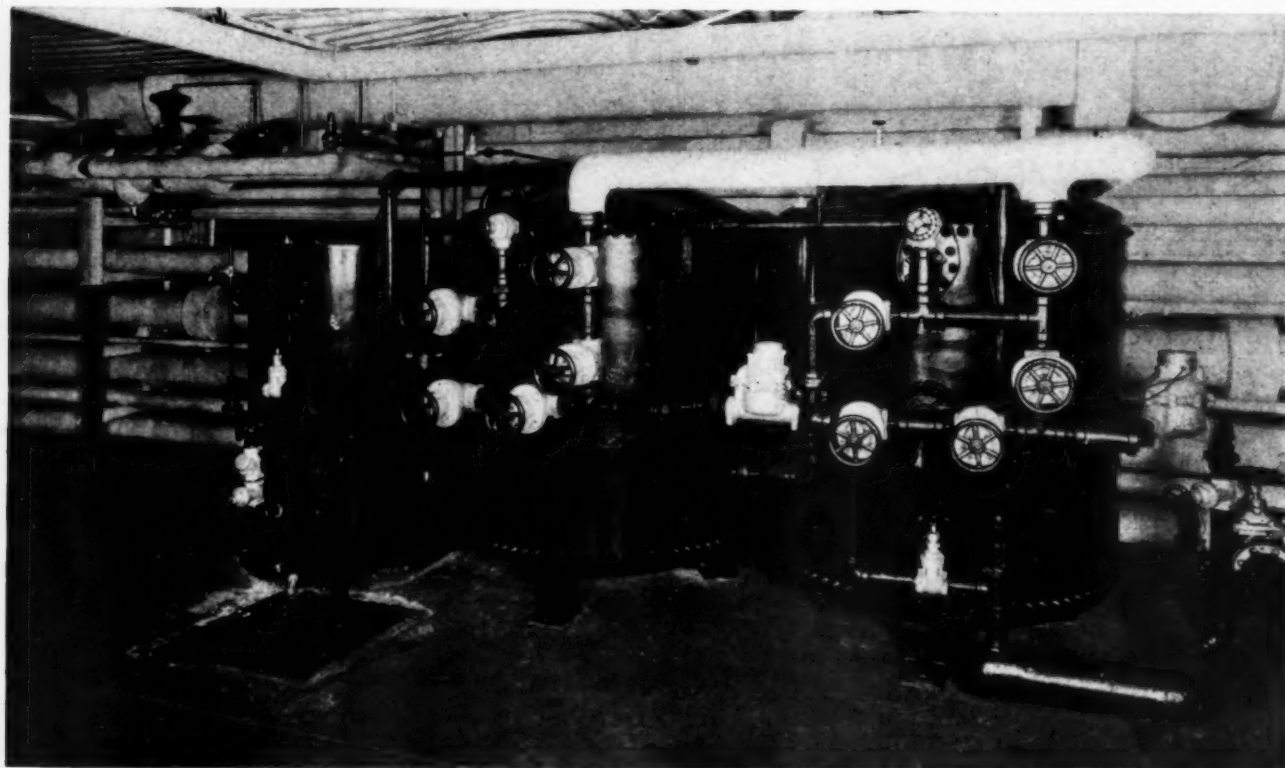
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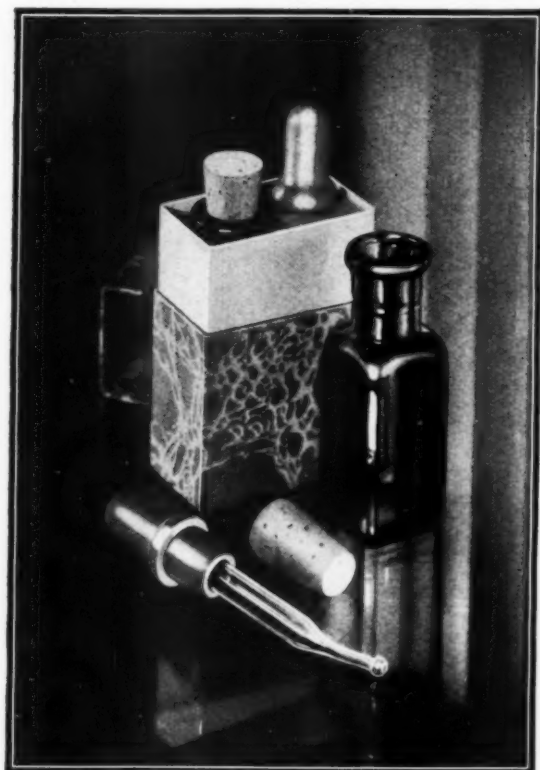


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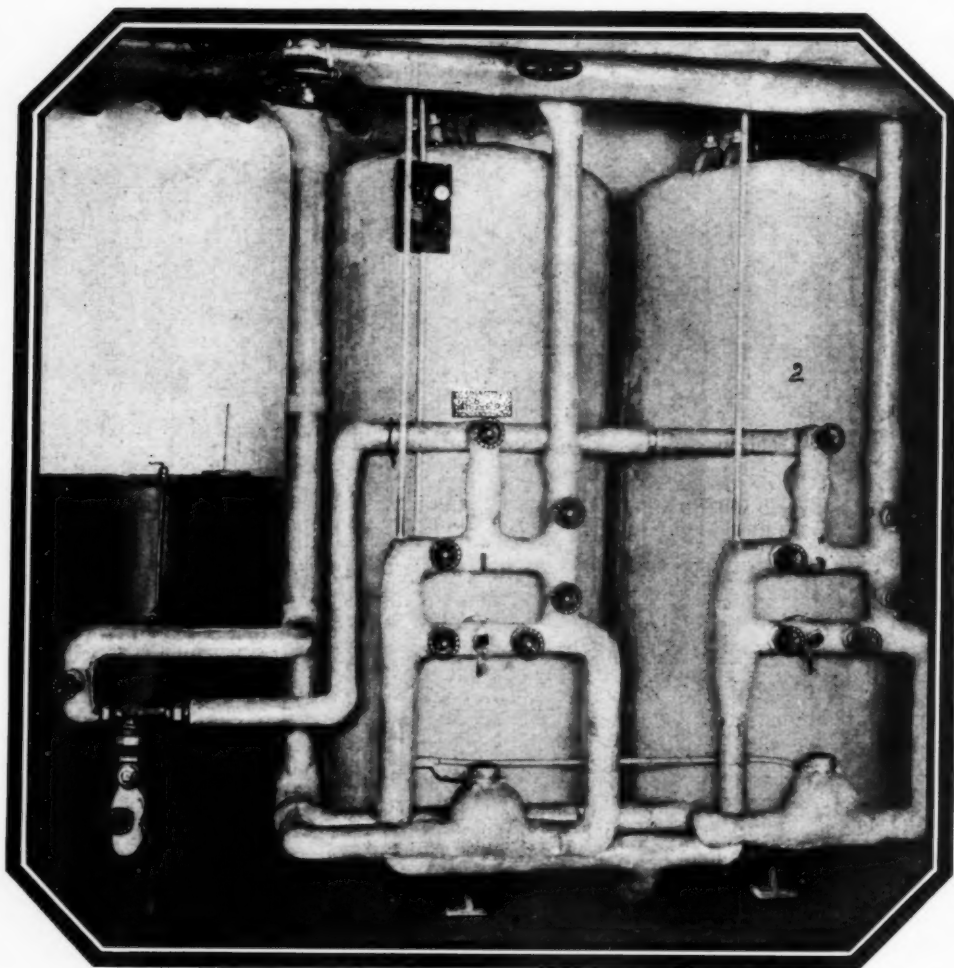
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The type of modern up-flow zeolite water softener pictured here is widely accepted and is the most effective method of producing zero hard water.



calcium and magnesium sulphate, $\text{CaSO}_4\text{—MgSO}_4$, may be picked up and hard water result.

For the sake of convenience, hardness in water is expressed as its calcium carbonate equivalent in grains per U. S. gallon. The various salts already mentioned as causing hardness vary in their value in terms of calcium carbonate. Thus 1.62 grains of calcium bicarbonate, 1.46 grains of magnesium bicarbonate, .84 grains of magnesium carbonate, 1.36 grains of calcium sulphate or 1.2 grains of magnesium sulphate all are equivalent to 1 grain of calcium carbonate and will destroy as much soap. One grain of hardness per U. S. gallon will destroy 1.7 pounds of soap per 1,000 gallons of water. Years ago it was observed that certain natural sands called zeolite had the remarkable property of softening water. Investigation showed that these sands actually removed certain elements from the water, replacing them with certain component elements. The elements principally removed were calcium (Ca) and magnesium (Mg) and the replacing element was sodium. The result was that the water was softened, the hard salts containing calcium and magnesium being replaced with the equivalent sodium salts.

The next step was to harness this natural phenomenon and make it do useful work. The first softeners were slow in doing this work and it was not uncommon for a small softener to require from twelve to eighteen hours to recondition the mineral after its bed had been exhausted. The capacity of the mineral was also comparatively small.

After extensive research and development these handicaps were overcome. To-day a single cubic foot of zeolite will exchange as high as 12,000 grains of hardness whereas in the early stages 1,000 grains was considered excellent.

The time to recondition the zeolite has been reduced from eighteen hours to approximately thirty minutes, giving us to-day the modern up-flow zeolite softener, which is widely accepted and is the most effective method of producing zero hard water. As the hard water is passed through a bed of zeolite the sodium replaces calcium and magnesium stays behind in the softener. The reactions are practically as follows:

| | | | | | | |
|---|-----------------|------------------------------------|--------|--------------------------------------|-----|--|
| Ca or Mg salts (scale forming) | in contact with | Na zeolite (in apparatus) | yields | Na salts (nonscale forming) | and | Ca or Mg zeolite (stays in apparatus) |
|---|-----------------|------------------------------------|--------|--------------------------------------|-----|--|

Perhaps the most wonderful property of zeolite is that it can be entirely regenerated by merely reversing the process. By passing a solution of sodium chloride (common salt) through the zeolite bed, the reactions are as follows :

| | | | | | | |
|--|-----------------|-----------------|--------|--------------------------------------|-----|--|
| Ca or Mg zeolite (calcium and magnesium zeolite) | in contact with | NaCl (brine) | yields | Na zeolite (sodium zeolite) | and | Calcium and magnesium chloride (to waste) |
|--|-----------------|-----------------|--------|--------------------------------------|-----|--|

The zeolite is again ready for water softening.

A survey of twelve leading hospitals in the United States using water softeners shows the average yearly savings to be as follows: In the laundry 40 per cent, in the boiler plant 25 per cent, in the sterilizers 25 per cent and in the equipment 30 per cent.

We shall take a hospital of 200 beds and see what these savings actually are in dollars and cents. A hospital of 200 beds requires approximately 50,000 gallons of water a day. Presuming that the water is 10 grains hard, a softener with a capacity of 17,500 gallons at each regeneration, regenerated three times a day will furnish this quantity of soft water. The cost of the softener is ap-

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No More Cold Food Service

*Now—A Way That Not Only Keeps Hot Dishes Perfectly,
But Actually Saves Time and Money Doing It*

New Type Hot Food Conveyor Works Automatically... Uses Electricity Only

HERE now is a way of keeping foods hot and serving them with all the original freshness and flavor just as they come from the stove... that saves time, money, trouble! Rapidly being adopted by progressive hospitals everywhere, it will pay you to investigate this new invention.

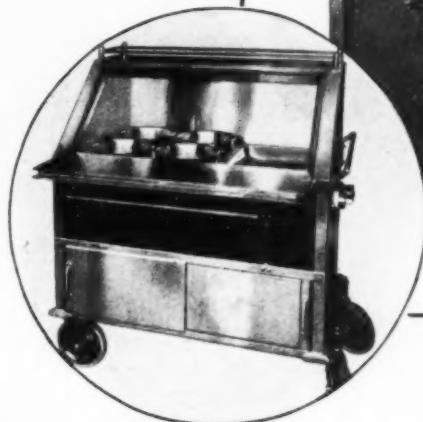
What It Is

Called Thermotainer Hot Food Conveyor, it is a portable metal cabinet that employs a new patented principle of keeping foods. It works automatically and operates on a standard electric current. And comes in 3 special types to meet every need.

How It Works

Thermotainer Hot Food Conveyor keeps foods in sealed compartment warmed by a surrounding blanket of heated circulating air. No water or steam is used. Thus, food deterioration is practically stopped. For, kept with original heat and individual moisture content intact, every food remains fresh, as when newly cooked.

And—not only is the food kept piping hot,



Conveyor Type, loaded in main kitchen for service direct onto trays from corridors, Broadlawn Hospital, Des Moines, Iowa.



This tray Conveyor is used in the Wichita Hospital, Wichita, Kans. After loading in main kitchen, the conveyor runs down the corridors and trays are delivered direct to rooms—every food value the same as when first cooked.

THERMOTAINER

System Includes:

Roll Warmers. 2, 3 and 4-drawer Stationary and Conveyor types. Preserves rolls and bakery goods in fresh and hot condition for hours.

Hot Food Conveyors. To serve any number of people at a distance from the kitchen. For banquets, room service or hospital use.

Cafeteria Service Counter. Replaces the steam table for displaying and serving meats, vegetables and rolls in efficient and sanitary manner. Ideal for the nurse's dining room.

Kitchen Units. Replace steam tables for storage of food in the kitchen. 315

but since the air in the food cabinet itself is motionless, the flavor of one food will not pass to another.

3 Special Types

3 Special type Thermotainer Conveyors meet every need—A Drawer Conveyor for plate service; Tray Conveyor for kitchen-prepared tray service; and Inset Conveyor designed to carry food for tray service in corridors. (This also comes in stationary type for kitchen use to replace steam table.) Each type comes finished in sanitary Monel or Alleghany metals.

Built To Meet Your Needs

Every Thermotainer installation is engineered to meet the needs of the particular service it covers. May we analyze your

food service system for you and submit blue-prints of special Thermotainer Units for your individual plan? Simply write to nearest office listed below.

WATERS-GENTER COMPANY
Dept. MH-T-12, 219 North Second St.,
Minneapolis, Minnesota

Eastern Sales Office: Tumbridge Sales Corporation, 196 Lexington Ave. at 32nd St., New York. Chicago Sales Office: Waters-Genter Company, 222 W. Adams St., Chicago, Ill. Pacific Coast Sales Office: C. N. Hildebrandt, 973 Market St., San Francisco, Calif.

A Division of
MCGRATH ELECTRIC COMPANY

A Unit of

The THERMOTAINER System

(U. S. patented, registered, copyrighted)
Made under Johnson Patents by the Waters-Genter Co.
Makers of the Famous Toastmaster



No. 123



No. 111



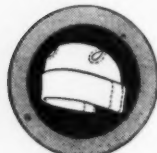
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No. 154



No. 211



No. 212



No. 505



No. 560 FRONT



No. 560 BACK



No. 510

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proximately \$1,500, including installation. The interest on the investment at 7 per cent amounts to \$105, the depreciation at 20 per cent amounts to \$300. The amount of salt required over a year is fifty tons, which at \$15 per ton will represent a cost of \$750. The plant will require one and one half hours' attention per day, which at the rate of \$.60 per hour will amount to a cost of \$330 per year, making the total cost for the first year \$1,500.

What returns may be expected on this investment? The laundry uses approximately 5,000 gallons a day, 3,000 gallons of which are used in the washing and the remaining 40 per cent as rinse water, which, of course, does not consume soap. Inasmuch as 1 grain per gallon of hardness destroys 1.7 pounds of soap for each 1,000 gallons, over a period of one year 15,300 pounds of soap are saved which at \$.10 a pound represents a savings of \$1,530. In destroying the soap the hardness reacts with the soap to form insoluble curds (calcium salts) which get into the fabric and cannot be completely removed. Excess rinsing will remove a certain amount of these salts but enough will remain to cause graying, create an unpleasant odor and give a harsh feel to the fabric. The decomposition of these salts causes the destruction of the fabric, thus increasing the replacement of linens. On the other hand, when soft water is used linens retain their color, remain soft, the unpleasant odor is eliminated and increased life is assured. In addition to this, between 70 per cent and 80 per cent less soda will be required, which will add another \$200 to the savings, making a total of \$1,730 savings in the laundry alone.

Other Savings

A boiler plant capable of developing 100 h.p. will be ample to take care of this hospital. Operating with 50 per cent makeup, 4,800 gallons per day will be required. Prior to the installation of the water softener, boiler compound is used, the rate being one pound to 3,000 gallons. Over a period of a year, 584 pounds of boiler compound at \$.10 a pound amount to \$58. This cost is eliminated by the use of soft water. Also, when hard water is used the boilers have to be cleaned once every month. This requires nine man hours for each cleaning at \$.60 an hour which amounts to \$64 a year. With soft water this is reduced to two cleanings a year, or a cost of \$10, with a savings of \$54.

Scale 1/16 of an inch thick is estimated to cause a loss of fuel efficiency varying from 10.0 per cent to 12.6 per cent, no matter what type of fuel is used. The insulation caused by the constant accumulation of scale on the inside necessitates the use of additional quantities of fuel. With the use of zero water, for every grain of hardness eliminated there is a net saving of 1 per cent in boiler operation. With the boiler plant operating at an average of 100 per cent of rating, and 70 per cent efficiency being obtained from the boilers, coal will be burned at the rate of 4,454 pounds a day when the coal contains 13,000 B.t.u. to each pound. As we have already stated, a scale of 1/16 inch is estimated to cause a loss of 10.0 per cent to 12.6 per cent; as this water contains sufficient hardness to produce such a scale, a loss of 10 per cent is taken. At this rate 445 pounds of coal are lost daily, amounting to 80.1 tons over a period of one year. At \$2 a ton this represents a loss of \$160 a year. The total savings from all sources are summarized in the accompanying table.

The savings in the boiler room itself are extended to wherever the steam from the boiler and hot water is carried. Hot water piping and steam coils are rapidly scaled and closed when hard water is used. Instruments sterilized in boiling hard water are affected. Savings from various sources are conservatively placed at \$250. In addition to these savings, softened water aids materially

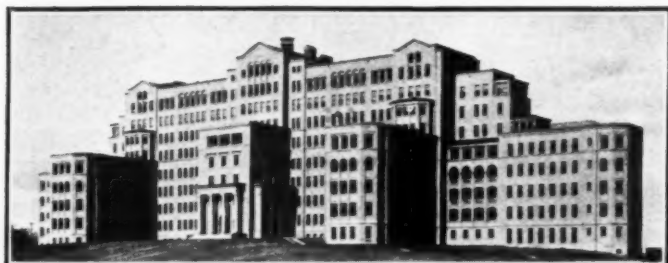
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OR SCRUBBING *—are yours*



Unretouched photograph of Johnson Genuine Wax-protected corridor in the Milwaukee County Hospital, one of the many distinguished hospitals where floors are protected and beautified by the Johnson's Wax method.



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This machine supplied free (special offer to hospitals) with your order for Johnson's Genuine Wax.

Equally well suited to wood, linoleum or composition. For 46 years S. C. Johnson & Son have been supplying Johnson's Wax to distinguished hospitals, schools, institutions. A letter will bring a Johnson engineer to analyze your particular floor problem and submit an authoritative recommendation without the slightest obligation to you. S. C. Johnson & Son, Racine, Wisconsin.

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Prove it yourself—to your own satisfaction—that O'Brien's 2-Hour Enamel cuts your maintenance costs! It's a brand new kind of finish—secret base—exclusive formula. Its speedy drying means faster work for your men—no lost time—no lost motion—**MORE** rooms ready **QUICKER** for patients. Its remarkable toughness means longer life—again lower costs!

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Use This HOSPITAL "PROOF-COUPON"

Simply tear out the "proof-coupon" below—have your secretary mail it in. It brings you a **FREE** pint for tests. You owe it to yourself—and your institution—to grasp this cost-cutting opportunity! Act today—**NOW!**

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Send me a **FREE** pint of O'Brien's 2-Hour Enamel for testing.
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by adding to the comfort of the patients. Soft water improves the flavor and quality of the food, gives cleaner and more comfortable bed linen, more comfortable and efficient baths and longer life to fabrics.

It is apparent, therefore, that the water softener is really a necessity and that in addition to increasing materially the comfort of the patients, it will pay for itself within two years. There is probably no other piece of equipment in the hospital to-day that is capable of such performance.

ESTIMATED ANNUAL COST OF ZEOLITE WATER SOFTENER FOR A 200-BED HOSPITAL Based on Fuel Depreciation in Five Years

| 10 Grain Water | |
|--|------------|
| Original Cost | \$1,500.00 |
| Operating Cost | |
| Interest @ 7% | \$105.00 |
| Depreciation (Reserve) @ 20% | 300.00 |
| Repairs @ 1% | 15.00 |
| Salt | 750.00 |
| Labor | 330.00 |
| Total Operating Cost for One Year.... | \$1,500.00 |
| Annual Effective Savings | |
| In Laundry | |
| Soap | \$1,530.00 |
| Soda | 200.00 |
| In Boiler Room | |
| Compound | 58.00 |
| Labor | 54.00 |
| Fuel | 160.00 |
| Miscellaneous, repairs, plumbing, still, steril- izer | 250.00 |
| Total Savings Ef- fected for Year... | \$2,252.00 |
| Income From Savings | |
| Interest @ 7% based on average savings per month over yearly pe- riod | 71.24 |
| Total Savings and Income for Year.. | \$2,323.24 |
| Net Savings Effected Each Year for Five Years | \$ 823.24 |
| Net Savings Effected Each Year After Five Years | \$1,228.24 |

New Water Softening Equipment Adapted to Any Hospital

Two new models of water softeners have been developed recently. One model, which comes in several sizes, has two tanks, one for the softening mineral and one for the salt used in regeneration. The other model has only one tank, and dissolved salt is sucked into the softener during the regeneration process.

Operation of these softeners is based upon the same underlying principle used in former models—a process of filtration in which the hard bases of hard water are exchanged for soft bases. Raw water passed through a mineral bed emerges soft because all of its calcium, iron or magnesium salts have been converted into sodium salts by exchange.

New features of these models include an operating wheel which controls the various operations. Control points, such as "soften" "regenerate" and "off" are plainly marked on the wheel. Control of the water supply lies in one valve mounted on the top of the softener shell. In the least expensive type, salt required for regeneration is measured into a bucket or similar container and dissolved. The salt solution is automatically sucked into the soft-



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is Ready . . . Ask for it

The Improved NURSES' SIGNAL-PHONE

THE new Nurses' Signal-Phone provides, in addition to the customary features of door lamps, corridor lamps and signals at the nurses' station, a unique telephonic contact between patient and nurse made possible by the super-sensitive Dictograph microphone and "soft speaker."

The operation of the system is extremely simple. To call the nurse, the patient presses a push button attached to rubber covered cord within convenient reach. Immediately a lamp signal is lighted over the door and an annunciator visual on the nurses' Signal-Phone tells which patient is calling. In addition an audible signal is provided in the form of a



soft-toned buzzer. The nurse lifts the receiver on her Signal-Phone, raises the key under the signal, and speaks to the patient.

In the patient's room, the nurse's voice is heard from the "soft speaker," as clearly as tho she were at the bedside. Conversational contact, with the Signal-Phone, is as effortless as tho nurse and patient were together in the room.

The nurse, knowing what is required, is saved the usual preliminary trip, and the patient is served in double-quick time. It is the most significant short-cut ever designed to simplify the communication problem between nurse and patient.

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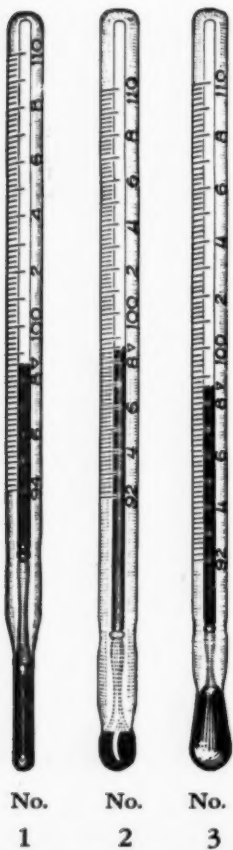
The
"TEMPERED GLASS"
Thermometer

Faichney's process hardens and toughens the glass and makes it so strong that breakage is reduced to the minimum, thereby saving the hospital a large part of the yearly expenditure for replacement.

Accuracy assured. Pass all Gov't requirements. State Seals furnished in Mass.—Conn.—Mich.

Any of the
THREE STYLES
ONE PRICE
\$6.00 Dozen

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Faichney Instrument Corporation
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... Doz. No. 3

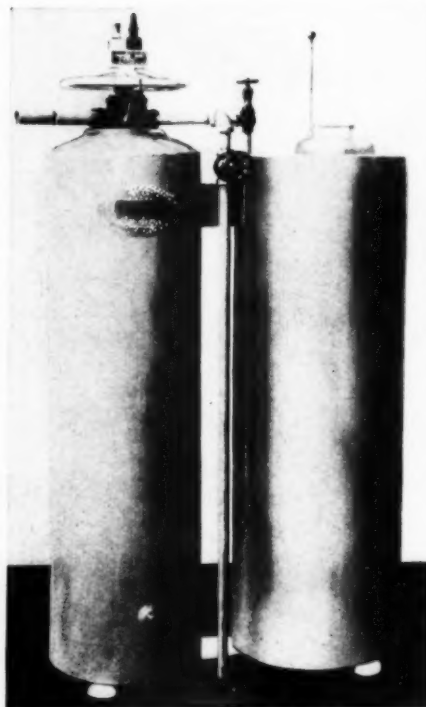
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Dealer's Name

ener when the operating wheel is turned to the "regenerating" position.

Small hospitals which may have believed heretofore that the larger sizes of water softeners were too expensive for their use will be interested in these new models.



This type of water softener, which comes in two sizes, has two tanks, one for the softening mineral and one for the salt used in regeneration.

The double tank model comes in four different sizes. Capacity in gallons of water that can be softened between regenerations of the mineral varies with the hardness of the water, as expressed in grains per U. S. gallon. Range of models and sizes is extensive enough to provide a model suitable for every size of hospital.

A Hospital Bed for Open-Air Treatment

By JOHN JOSEPH NUTT, M.D.
New York City

Since porches are being used more and more by hospitals in the care of both medical and surgical cases, the experience of the New York State Orthopedic Hospital for Children, West Haverstraw, when that institution was in existence, may interest many administrators.

The open air treatment of patients which the hospital had begun in 1909 was not easy to carry on because of the difficulty with which the beds were moved back and forth between the wards and porches. Those in charge lessened this difficulty by doing away with thresholds and by providing the beds with large casters and in some cases with small rubber tired wheels. At certain seasons, however, when severe storms arose with little warning, there was considerable excitement, a great deal of labor and much marring of the door jambs in getting the patients into the wards before the deluge. In fact, so much work was connected with this bed rolling that it was quite the ordinary thing, when a storm was brewing, for patients to be deprived of the privilege of the porches.

For several years the hospital experimented with beds which would facilitate the moving of the patient from outdoors to indoors. These were made in the institution's workshop. After much experimentation and with

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Extend
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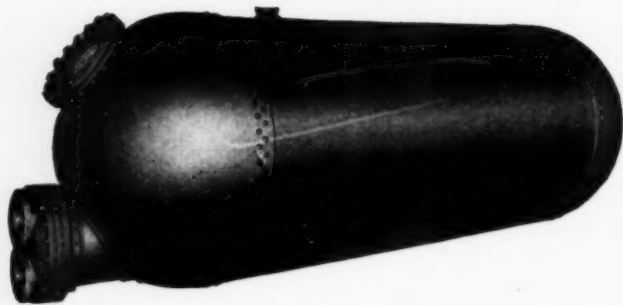
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FOR MORE THAN TWENTY-
FIVE YEARS OF PATRONAGE—

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BABEOLEUM—The Perfect Baby Soap

**Materials for BUILDING MAINTENANCE, FIRELESS FUMIGATORS
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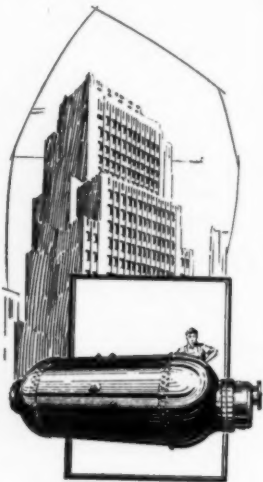
NOW.. is the TIME for COPPER BOILERS!



The price of copper is lower today than it has been for years. This condition gives an unequalled advantage to the purchaser of copper boilers. The superiority of copper over every other metal for hot water boilers is obvious to every one and the differential in price between boilers constructed of copper and those made of steel or galvanized iron is less today than it has been in years. This is a buyer's opportunity and the shrewd purchaser of hot water heating equipment is taking advantage of this condition which is enabling him to secure the finest equipment at remarkably low prices.

Now is the time to install Dahlquist copper boilers for new work or to replace old steel or galvanized iron units with the vastly superior copper product.

The Dahlquist Manufacturing Company produces a complete line of copper hot water heating boilers made to the very highest standards of material and construction from the largest unit for industrial purposes to the smallest range boiler for the cottage. There is a Dahlquist copper boiler to suit your requirements.

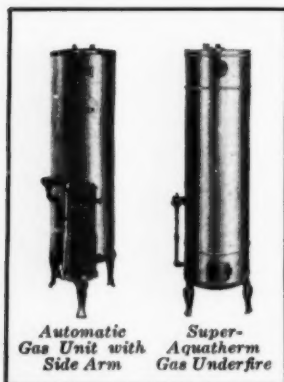


Some recent hospital installations:

- 1—2000 Gal.—Northwestern Hospital, Minneapolis, Minn.
- 1—2000 Gal.—St. Barnabas Hospital, Minneapolis, Minn.
- 7—1500 Gal.—Allegheny Hospital, Pittsburgh, Pa.
- 3—2200 Gal.—Allegheny Hospital, Pittsburgh, Pa.

Ask us for full information regarding the Dahlquist complete line of copper boilers for industry and home.

Dahlquist fundamental improvements for household units are recognized throughout the world. The Dahlquist Aquatherm and the Dahlquist Turbo-Aquatherm have greatly increased the efficiency of hot water service for the home. Write for full particulars.



Dahlquist Mfg. Co.

A, 2nd & West 3rd Sts., So. Boston, Mass.

elimination of the difficulties that arose, a bed was planned to supply a new building then under construction. The design was turned over to a bed manufacturing company for execution. This bed proved to be successful in every way.

The frame of the bed runs on 2½-inch iron wheels, grooved to roll on a special track, on which the bed rests. This track extends from inside the ward to the porch. The track is sunk into the window sill in such a way that



the windows fit snugly when closed. The windows have three frames, which makes it very easy to raise and lower them. The tracks are hinged immediately within and without the window sill, so that they may be raised to a vertical position and held by a safety catch which is manipulated from the side of the window and which makes possible lifting the tracks out of the way while the wards and porches are cleaned.

The beds roll so easily that a child may easily move the bed to the porch from the ward or vice versa.

Suggestions for Cleaning Marble

Suggestions for cleaning marble are offered in *Hotel Management*.

Marble is soluble in acid and therefore should never come in contact with it. Polished marble is even dulled by contact with ordinary kitchen acids such as vinegar, lemon juice and oxalic acid. Marble should always be cleaned, the article says, with solutions of baking soda, soap and water or other alkalies. A cloth dipped in turpentine and rubbed over polished marble both cleans and polishes it. Stains that have penetrated through the polish may be removed by applying a paste of alkali cleansing powder with turpentine for a few minutes, rinsing it off with clear, warm water and polishing.

An Improved Bradford Frame That the Hospital May Make

By R. D. BRISBANE

Superintendent, Sutter Hospital, Sacramento, Calif.

Anyone who has struggled with the old-fashioned Bradford frame, trying to tighten up the rawhide thongs or having some of the grommets tear out just when the patient has been placed on it will welcome a new device with none of the discouraging features of the old one.

C. M. Petersen, of the engineering staff of Sutter Hos-



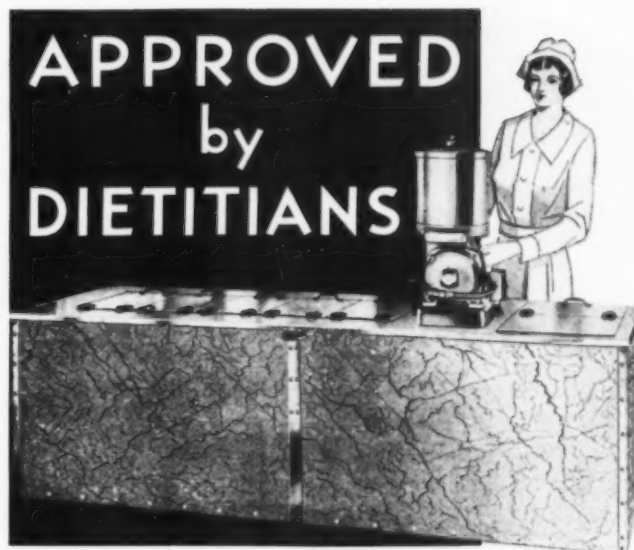
"Net Wholesale Prices stripped of all rebates, dis- counts or other camouflage"

16 years ago when we first opened our doors we announced a policy of publishing "net wholesale prices". Price conditions were chaotic. Discounts were used as a means of confusing purchasers. We believe this policy of ours has done more to take the mystery out of hospital buying than any other single factor.

Our new 1931 catalog, larger than any previous issue, listing over 500 price changes (most of them downward) is a reiteration of this policy. It is also an open challenge to you to make your own comparison of our prices and quality with those quoted by any other reputable hospital supply house in the country.

If your copy of the 1931 catalog has not been received or has been mislaid, let us send you another.

WILL ROSS, Inc., 457-59 E. Water St., Milwaukee, Wis.



Taylor-made Ice Cream is an excellent Food

Those who are responsible for food preparation, in hospitals, know the value of ice cream as a food. They know its dietary value, when prepared under methods that provide control of quality and purity. That's why they endorse the Taylor Freezer.

For the Taylor method of making ice cream, sherbet, and water ice assures high quality and purity. It permits the making of ice cream foods of controlled dietary value right in the hospital under the most sanitary conditions. Ice and salt are not used—there's no fuss or muss. And the frozen product is deliciously smooth and appetizing.

A Taylor Freezer will do all this without the use of extra help or trained help. More, it will save $\frac{1}{4}$ to $\frac{1}{2}$ the cost of factory-frozen ice cream.

Hear what other hospitals are accomplishing with Taylor Freezers. Their stories will be sent on request if you just mail the coupon below.

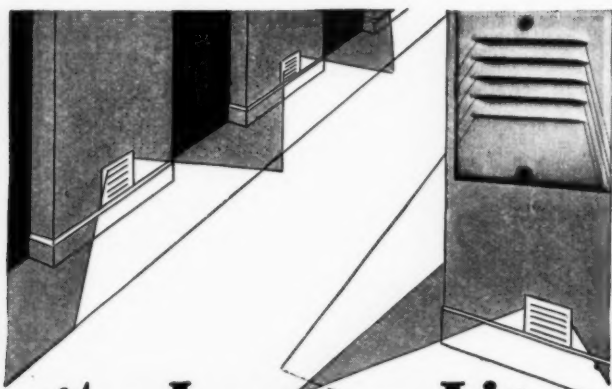


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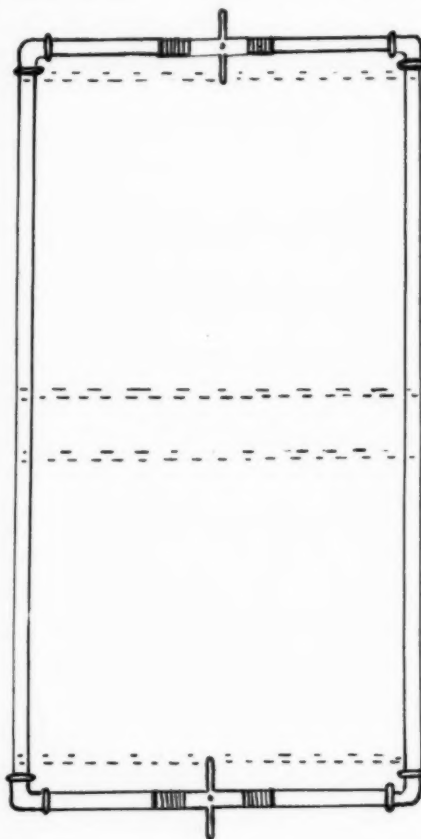
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IMPORTERS INC. ROASTERS

"The Coffee With the Delicious Aroma"

371-375 W. Ontario St., Chicago, Ill.

pital, Sacramento, Calif., designed the new frame shown in the accompanying sketch. This frame is not only more comfortable for the patient—the canvas is always taut—but it is less expensive in upkeep.

The new frame is made of 1-inch galvanized pipe, about 3 feet by 6 feet and 3 inches, with steel turnbuckles in the middle of either end. Each turnbuckle has a right hand thread on one end and a left hand thread on the



This design of the new Bradford frame shows the simplicity of construction which renders it more comfortable to the patient and more easy to handle.

other, these fitting into corresponding threads on the inside of the pipe frame so that every revolution of the small handle or bar in the turnbuckle either tightens or loosens the frame sideways. A machinist can make these turnbuckles in a short time if the hospital does not own a lathe, and the institutional engineers can easily make the frame.

Instead of a canvas edged with grommet eyelets, two continuous pieces are made of canvas which, when doubled, will slip easily over the frame when it is slack. They should be made somewhat larger than a snug fit to allow for shrinkage of the cloth when it is washed.

Six of these frames are now in use in Sutter Hospital and have proved entirely satisfactory to the guests, the nurses and the doctors. They can safely be recommended to anyone desiring a troubleproof frame.

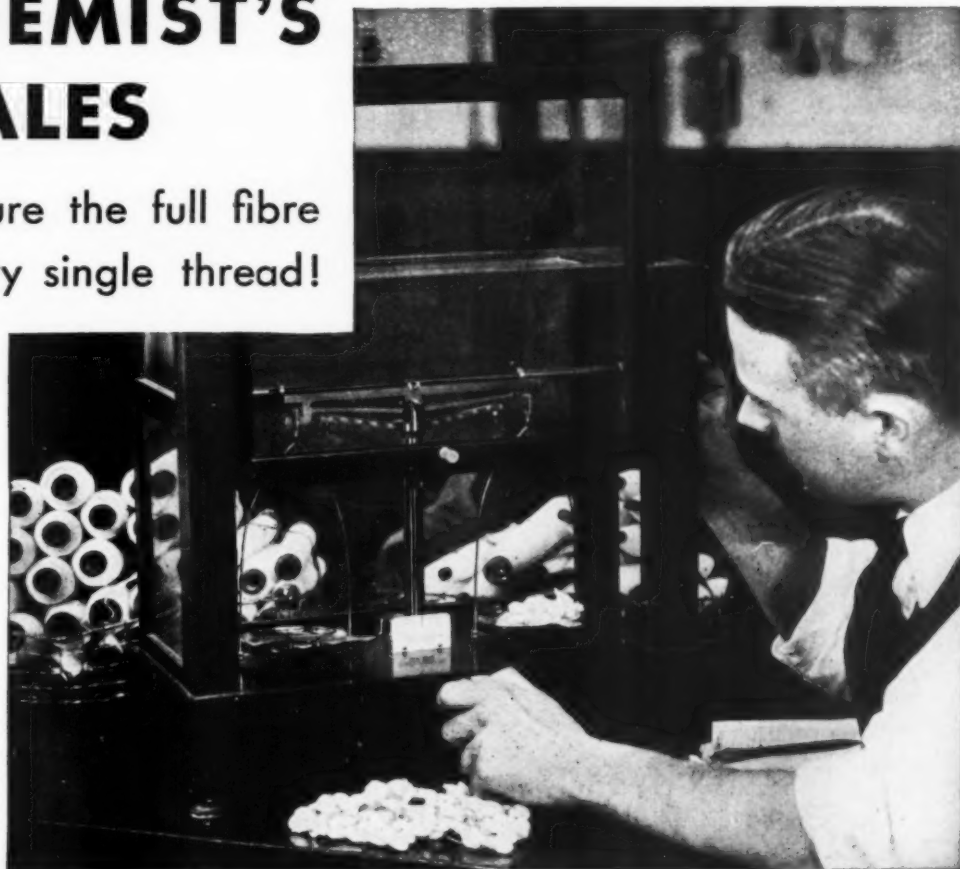
Portable Sound Equipment for the Hospital

"Patients were asked as to lines of reading they wished to undertake, and commercial studies led in the replies," writes Adeline M. Macrum, librarian, Tuberculosis League of Pittsburgh, in *THE MODERN HOSPITAL* for August, 1930. The replies show a state of mind—a determination to get well.

The Pittsburgh Tuberculosis Sanatorium, which is managed by the league, has an extensive library and believes

PEQUOT SKEINS ARE WEIGHED ON CHEMIST'S SCALES

To insure the full fibre content of every single thread!



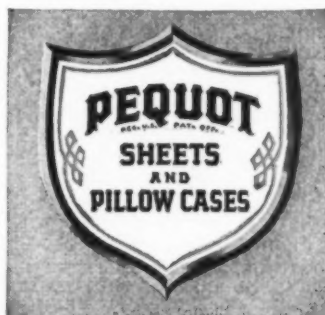
YOU yourself know these accurate balances. Skeins of Pequot thread are constantly being weighed on them—to make sure that every thread has its full, strong quota of long tough cotton fibres. The Pequot thread is scientifically tested at every stage of manufacture. It must be *extra* strong, so that the fabric, which is made up of thousands of these threads, is extra strong.

The Pequot label has come to mean *uniformly* longer wear, particularly where wear is hardest, as in hospitals. Pequot sheets are guarded from cotton bale to shipping platform to keep that reputation.

On your beds, in your laundry, this exacting care means long-enduring *economy*.

Pequot sheets are, as a result, used *more* by hospitals than any other brand.

Pequot Mills, Salem, Mass. *Name-woven* Pequot sheets, and *reversible* Pequot Sheets (equal hems at both ends) upon order. Parker, Wilder & Co., Selling Agents: New York, Boston, Chicago, San Francisco.



PEQUOTS ARE USED MORE BY HOSPITALS THAN ANY OTHER BRAND OF SHEETS

NOW . . . QUICK, SAFE RESCUE OF HOSPITAL PATIENTS FROM

BUTLER

FIRE SMOKE GASES AND PANIC



T U B U L A



FIRE ESCAPE

Slide the patients on their bed mattresses to the exit leading into the tube, start them down and they come to a gentle stop at the bottom. A quick, safe, gentle slide to safety, protected all the way from smoke, flames, water, gases and, worse still, PANIC.

The pressure of a child's foot on the treadle of the exit leading into the tube, swings and holds the doors wide open giving unobstructed entry into the spacious mouth of the tubular slide at floor level. Able patients, nurses, internes and other attendants swing on the handy bars at top and sides into the tube. Through the Butler Tubular Fire Escape hospitals can be emptied five times faster than by any other means. Ice, snow and sleet cannot hazard rescue work.

Send for complete details and information about our free survey service. The possibility of fire is always present in every type of building. Better face the possibility than the actuality.

BUTLER MANUFACTURING CO.

1253 Eastern Ave.
Kansas City, Mo.

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Minneapolis, Minn.

so thoroughly in encouraging this state of mind in its patients that it has installed talking picture equipment both because of the educational opportunity offered by the talkies and because of their entertainment value. The installation includes regular theatrical type projectors and is the same, in fact, as that used in the majority of theaters throughout the country.

The Pittsburgh Tuberculosis Sanatorium plans an entertainment and news program to be carried out along the ideas of its patients, supplemented by selected educational subjects.

Talking pictures, which draw millions to the theater daily, offer to hospitals and sanatoriums, isolated as they are in a sense, a popular and varied form of entertainment with selections of the best talking pictures from the theatrical circuit, the news reels and the educational films.

The educational talkie is considered by many prominent teachers an extremely important addition to modern school and university curricula. Its attention compelling directness, clarity and graphic portrayal, and its wide popularity in the theatrical field are the reasons. Sound films bring the world to the schoolroom as no other teaching medium can do. A film library that is constantly becoming more comprehensive in scope already covers a wide range of subjects from the three R's of the grades to the college graduating thesis.

Portable Equipment Is Easily Set Up

Architects who design hospital and sanatorium buildings are specifying wiring to take care of movie equipment and in some cases they are including permanent projection rooms. Portable equipment can be easily moved from one part of the hospital building to another and it can be operated in any room that is of average size.

The screen and receiver, or horn, can be set up as desired and removed in a few minutes. In some installations the screen, which rolls up out of sight, is permanently mounted with the loud speaker built into the wall behind it.

In these sound-on-film talkies the voice record is made photographically on the edge of the movie film and, as the film goes through the projector, a light ray passing through this sound track to a photo-electric cell reproduces electrically the original voice waves. The delicate currents are amplified many thousands of times and are reproduced in the receiver or loud speaker mounted behind the screen. The separate nonsynchronous equipment for music, when it is desired, is supplied in table form with racks for the records.

This nonsynchronous sound equipment used for concerts, dance music and for accompaniment to silent pictures is the sound-on-disc method. This separate music reproducer has duplicate turn tables and tone arms somewhat like those of the phonograph but far more accurately made, permitting continuous music and doing away with waits between numbers. A device called a fader, used in both synchronous and nonsynchronous apparatus, makes possible the change from one reel to another or from one record to another. It also controls the volume. The fader in nonsynchronous equipment makes possible the playing of appropriate orchestral music for silent movies. This is accomplished by having these "accompaniment" records marked with special guides that enable the operator to select the desired music. The amplifying equipment for these projectors is effective, and with both the picture and nonsynchronous music apparatus there is the same volume control as that supplied with standard theatrical sound film installations.

Why maintain a number of dishwashing departments when with but one department properly organized with

SUBVEYORS

(Patented)

carrying soiled dishes from the various floors and discharging them directly upon scrapping table in a centralized dishwashing department you will

- (a) Reduce your investment in unnecessary equipment.
- (b) Confine noises and odors incident to dishwashing departments to an isolated location.
- (c) Have absolute control of dishwashing crew.
- (d) Have more room for patients.
- (e) Reduce china breakage (more than 50 per cent).

Institutions will profit materially by installing Subveyors to handle soiled dishes as well as food on trays or in containers.

There are hundreds of subveyors in operation throughout the country which are demonstrating the economy and efficiency of this system.

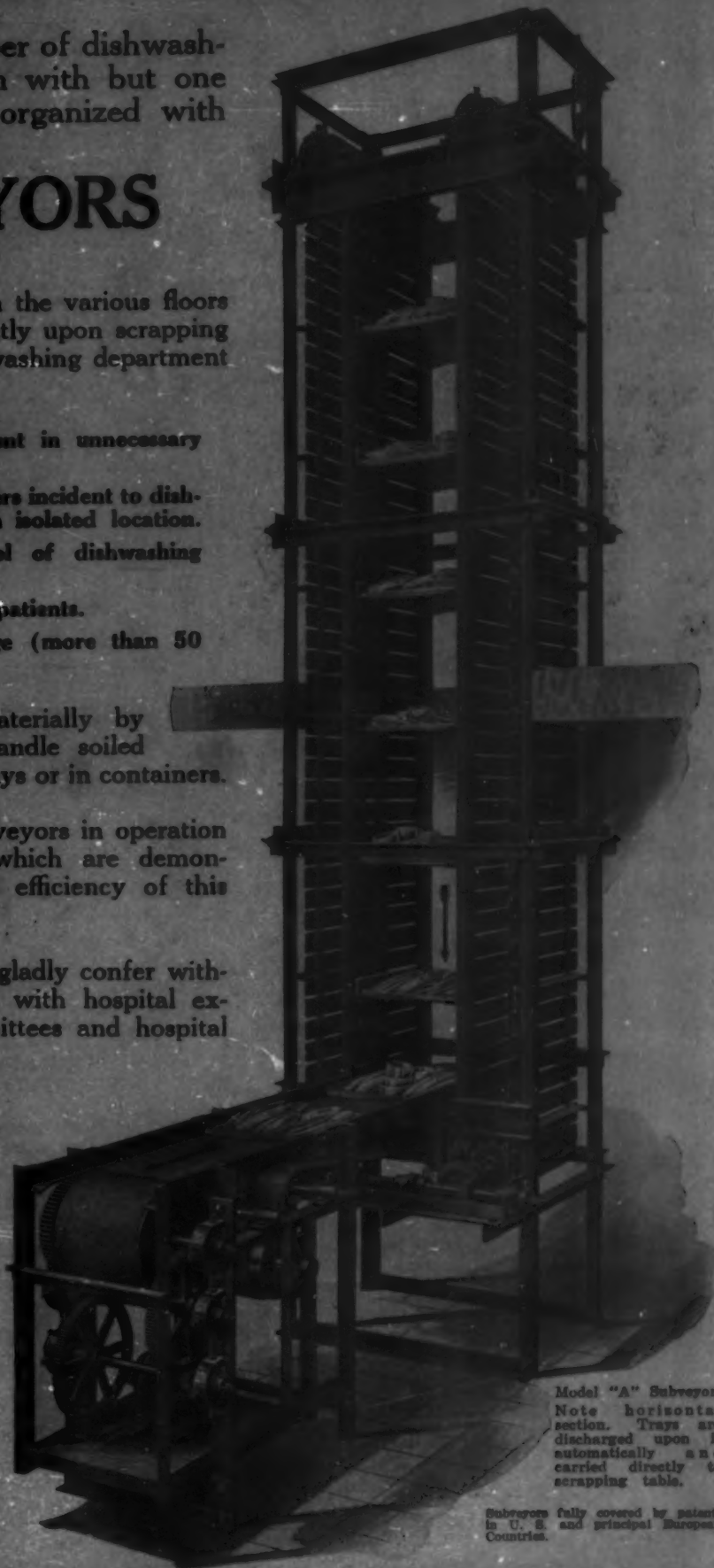
One of our engineers will gladly confer without expense or obligation with hospital executives, equipment committees and hospital architects.

It is only necessary for you to write us about your problem.

SAMUEL OLSON & COMPANY

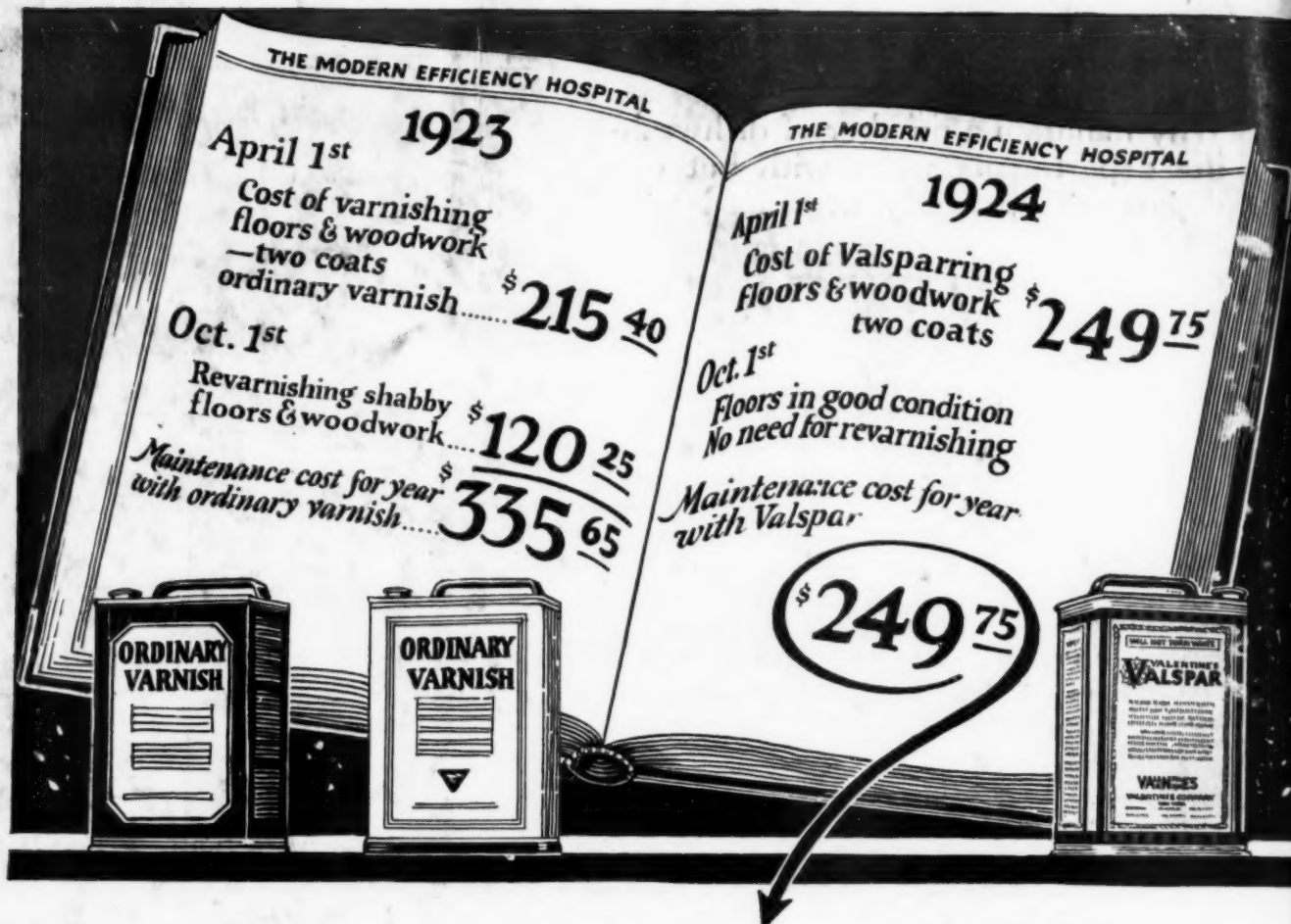
2418 Bloomingdale Avenue
CHICAGO, ILL.

5th Ave. Bldg., New York



Model "A" Subveyor.
Note horizontal
section. Trays are
discharged upon it
automatically and
carried directly to
scrapping table.

Subveyors fully covered by patents
in U. S. and principal European
Countries.



Low Maintenance Cost-with Valspar

Of course the figures shown above are not taken from the books of any one hospital, but they do represent the combined experiences of many.

Although Valspar's first cost may be slightly greater than that of ordinary varnishes, the labor cost being the same, Valspar more than makes up for this in greater durability and wear, and in the satisfaction that comes from having floors and woodwork always sanitary and easy to clean.

For Valspar is absolutely waterproof—can be washed with hot, soapy water and strong disinfectants without harm. Ammonia, alcohol and alkalis have no effect

on it and it is proof against accidents and spilled liquids of all kinds.

Then, too, there's the saving in time and trouble effected by using Valspar. This feature alone is worth the extra cost, particularly in schools, hospitals and other institutions where revarnishing means no end of inconvenience and often extra expense. For Valspar not only has far greater durability but it also dries quickly—ready for the second coat in 24 hours and for hard service in 36.

Valspar meets every need with the Clear Valspar Varnish; Valspar Varnish - Stain (Valspar plus transparent colors); and Valspar Enamel (Valspar solid-covering colors).

Reduce your yearly upkeep with Valspar

Largest Manufacturers of High Grade Varnishes in the World

This coupon is worth 20 to 60 cents



VALENTINE & COMPANY, 460 Fourth Ave., New York
I enclose dealer's name and stamps—20c apiece for each 40c sample can checked at right. (Only one sample each of clear Valspar, Varnish-Stain and Enamel supplied per person at this special price.)
Valspar Instruction Book with Color Charts, 15c extra.
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